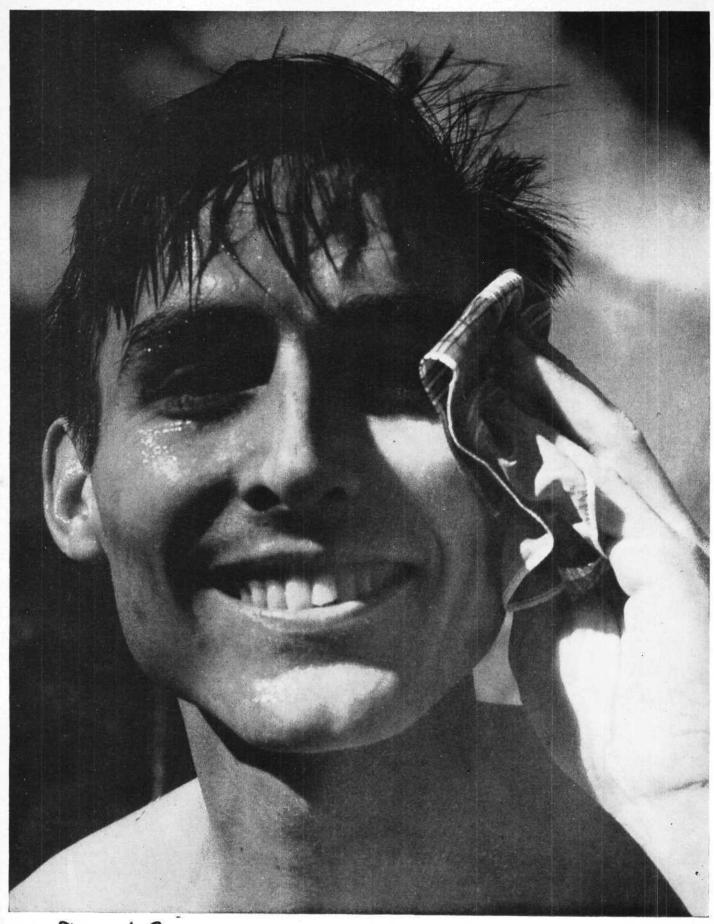
THE

MAGAZINE





Desert SunBy ROBERT J. SCHULZ
Los Angeles, California

Candid view at completion of a long desert hike. Photo taken with a Kodak Monitor 620. Super XX film, "G" filter. Exposure 1/50 sec. at F:22. Developed 12 minutes in D-76. Enlarged on Kodabromide paper No. 2.

DESERT Close-Ups

- · "Pilgrimage to Yaquitepec," in this issue, is the first published manuscript of Thomas Crocker. Crocker is a San Diego, California, artist whose earlier career was concerned with architecture. After studying at University of Minnesota he spent six years in South America building churches, schools and residences for the Presbyterian board. While there he traveled extensively in Colombia and Venezuela, covering nearly 5,000 miles in one year alone—through tropical jungles and towering Andes, by mule back, river steamer and Indian canoe. This career was abandoned due to illness contracted in South America. About ten years ago he went into the mountains near Julian, in San Diego's backcountry, where he built a cabin-studio, started painting, took frequent trips down into the desert, and gradually won back his health. It was during this period he be-came acquainted with Marshal South.
- After earning his M.A. at Columbia university, Weldon D. Woodson, who wrote July issue's story on Gila monsters, started free lancing nature and science articles. For the past 10 years his features have appeared in Scientific American, Travel, Natural History, Field and Stream, American Forests, Life, Camera Around the World, and many other mediums. Keith Boyd, his brother-in-law, has supplied many of the excellent and hard-to-get photo-graphs which have illustrated Woodson's stories.
- Oren Arnold, who is nationally known for his western novels, has written stories about two noted men, especially for DESERT. He tells how Clarence Budington Kelland, famous author of the Scattergood Baines stories and such novels as "Arizona" and "Valley of the Sun," has "gone desert" in recent years. A later issue will tell how Ross Santee has spread the atmosphere and character of the Southwest far and wide-through his black and white sketches. Some of the Santee drawings will be reproduced.

IS DESERT LATE? . . .

Wartime problems both on the production and circulation "fronts" have slowed down delivery of DESERT to its readers. Please wait until after the first of the month to notify us of non-delivery. But FIRST be sure you have given us your present address BEFORE the 5th of the month, so we will have had time to make the change on our mailing list. Otherwise there may not be an extra copy left for you. Because of paper shortage we must limit number of copies printed to minimum.

We are sure we can count on the cooperation of our DESERT friends in regard to address changes. If your address in the near future is uncertain, ask us to HOLD your copy for you.



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Moonlight view of Fort Churchill ruins, Nevada. Photo by Ros. Ammon, Reno.

GIFTS OF THE DESERT

By RUTH ANNE McUmber Lancaster, California Vast is the desert sky Wide and deep and blue, Leaving the spirit unhampered To calm the soul of you.

Close are the desert stars Low-hung from sapphire sky, Steadfast their appointed places— The stepping stones of God.

Sharp is the desert moon Spreading its radiance clear, Instilling the peace of ages To banish all that is drear.

Bright are the desert's flowers Laughing in matted brush, Gay with the spirit of freedom Far from the city's rush.

Glorious the desert sunrise, Brilliant the sunset, too. Drink deep of her peace and contentment— The desert's lavish gift to you!

COMPARISON

By N. W. TAYLOR Elkins, West Virginia He tiptoed in breathless silence Down a great and vaulted hall, Viewing those priceless paintings That were hung on the paneled wall.

Seeking the depth and meaning Of tones, that each artist stressed, Yet, he turned away disappointed, Feeling somehow unimpressed.

He had walked one day in a desert, O'er a drab and sun scorched plain, Straining his eyes through a distance That was foreign to dew and rain,

Then, he saw in a dusty sunset, When the daylight began to pall The work of that Master Painter, On the masterpiece of all.

He had looked on a giant canvas, Which was touched for a hundred miles, With the tint of a thousand rainbows And the light of a million smiles.

He had stood in a purple valley, By the side of a salty spring. He had lived a whole life in that moment, While he looked on the work of a king.

ODE TO THE CALICO MOUNTAINS

By Pfc. Harry Russell Westray 359th QM Service Company Yermo, California I looked around my valley small Just at the break of day And saw great mountains standing tall Against the sun's array.

I watched them till the sun was high And then to my surprise Their dark grey color away did fly Before my very eyes.

And then in brightness they did stand Great monuments of time Bedecked by nature's beauty grand With majesty sublime.

No one knows how long they've stood But God and God alone, He made them and said, "That's Good!" Thus stand these giants of stone!

DESERT JEWELS

By J. L. KRAFT Chicago, Illinois

Jewels and gems and beautiful stones
Are minerals and rocks and dinosaur bones
They come from the valleys, mountains and
streams

And the bowels of the earth yield the fire of dreams.

They hold you entranced, these wonders of God They are where He placed them in gravel or sod

Gems are where you find them—they're yours for the getting

They are where they are, regardless the setting.

No combination of color has ever been known To equal the beauty of a colorful stone The hues of the rainbow, the gold of the sun Are reflected in glory when the cabochon is done.

Agate rose of the desert and chalcedony so rare In bleak lonely places, why are they there? God scattered His jewels from clouds in the sky That's why we find them so low and so high.

Therefore we should search wherever we are For the jewels of heaven that came from afar He scattered them—He threw them away For people who love them to find them some day.

Desert Ghost Town

By BESSIE I. McWATERS
Oronogo, Missouri
While heat waves shimmer and dance, it sleeps
Like a dim mirage of the past;
As white-capped sand tides surge against
Old buildings crumbling fast.

And sleeping, it dreams of vanished days
When the pulse of life beat strong;
Then—fiddles whined and dancers swayed
Till glow of desert dawn.

Now—bottles tint mauve 'neath hot sun rays, Only lizards stir with the dawn; And faint eerie noises heard at night Are pack-rats moving their pawn.

DESERT SILVER

By Evangeline Thompson Winterhaven, California

The night has spread long shadows Where the butte is silver-white, And a coyote boasts of conquest To a moon that's silver bright. Wild mustangs drink and loiter By a silver-riffled pool, And a fox that's sheathed in silver Slides through silence pale and cool. The desert hoards her silver For the magic of the night, Then it's lavish in its giving; With witchery of fairy sprite, It has spread a silver carpet For desert feet so swift and light.

THE DESERT'S VINTAGE

By E. A. BRUBACHER Balboa Beach, California

Far across the desert's lonely hills Where purple shadows lie I ride along, a song upon my lips And hear some wild bird cry.

Far across the desert's lonely trails Where the coyotes slip along I ride along, a joy within my heart To hear the night wind's song.

Far across the desert's endless space Where hawk and eagle soar I drink deep of the desert's vintage rare And ever ask for more.

NEW MEXICO

By Barbara Leslie Tucumcari, New Mexico

Guess you tried to tell me about the West, The mountains, the valleys and all the rest. And now I wonder, if there where you are, There are vast sunsets and an evening star!

Do you laugh at tumbleweed on the street? Do you step inside and escape the heat? Does the wild verbena brighten the land Its vivid violet color the sand?

Are your mountains friendly and close to you? Do they wear a rose mist veil in the dew As the sun flows over the morning's blue And it tints the world with its own rich hue?

Do your mesa's rims hold the morning up In a ruddy and gold inverted cup? Does the mocking bird in the twilight hush Hover her brood in a cactus bush?

Did you speak of the dusk in the long ago? "The land of enchantment" where stars hang low.

And they drift so near that they lean to kiss? Why didn't you tell me it was like this?

It was in a remote section of the far flung Navajo reservation west of Monument Valley in Utah that John Hansen five years ago made his acquaintance with the Indians. Developing that friendship has been a matter of several years, much patience and a great deal of pleasure. John gives some humorous sidelights on the Navajo personality and home life in this record of a trip to the home of Dan Kinlichini Phillips with his friends Frank O'Brien and Win Cady.

I Went to the Hogan of the Kinlichini

By JOHN HANSEN Sketches by the author.

EAR Friend John, . . . I am very glad that you had sent us the the Desert Magazines. We are very happy that we got magazines . . . Lincoln always talk about you people he say he will go back with you when you come over again so he can talk with the people 'like my Dad' . . . Some of my people are having a very hard time now for food and clothing, because good many of



Elmer poured . . .



Portrait sketch of Dan Kinlichini Phillips by John Hansen.

us haven't got but a few sheep and goats, some haven't got any at all. . . . Remember your good friend, D. K. Phillips."

Reading this letter from Dan "Kinlichini" Phillips brought back vividly my first meeting with the Indian interpreter and guide at his home on the Navajo reservation 12 miles from Oliato Trading Post . . . nearest post office, Kayenta, Arizona.

Five years ago, as a bewildered tourist crossing the reservation for the first time, from Tuba City, Arizona to Bluff, Utah, I tried to make friends with the Indians by waving a hand from a safe distance. Cold, sullen stares were the response with no sign of recognition. Friendship has been five years in the making and my letters from the Navajo are prized possessions. You should know my friend Dan K. Phillips.

At a particularly trying trial hearing in the court at Monticello, Utah, Dan had acted as Indian interpreter. The prisoners, two Navajo, were required to post a satisfactory bond and at the end of a long list of signers, Frank E. O'Brien signed. Next day the prisoners were back on the reservation, free and well disposed toward Mr. O'Brien

Frank O'Brien is secretary to the Utah

state department of publicity and industrial development. He and Win Cady, from the city desk of the Salt Lake Tribune, and I, later visited the reservation.

We started for Monument Valley from Salt Lake City on Highway 50. At Crescent Junction we turned south on Highway 160 through Moab to Monticello. Temptation was strong to turn off into Arches national monument, Dead Horse Point or La Sal national forest, but we took state highway 47 from Monticello, driving through Blanding, Bluff and Mexican Hat to the Arizona state line. All through this area are "must" side trips. Natural Bridges national monument 50 miles west of Blanding, the Goosenecks of the San Juan, a section of the Old Mormon Trail—these provide travel thrills.

Just at the state line is the westward turn to Oljato. Oljato is one of the most remote trading posts in the country. It is about 15 miles west of Monument Valley—around and westward from the butte upon which Gouldings Trading Post is located.

Because of the circumstance of "O'Brien" seeming to the Indians to be the name that finally made the bond acceptable in the court at Monticello, his



Left to right—Win Cady, John Hansen, Frank O'Brien and Dan Phillips. At Dry wash water hole, the desert spring.

name became "Open Sesame" to the desert. The first two Indians we met on the wagon road to Oljato recognized the name, held hurried conference and one rode north into the endless desert to bring Dan Phillips, for whom we inquired, and the other guided us to Oljato. At the post we were turned over to the helper Bob, the young white assistant to the traders. He was full of questions about us, our car, our trip and our homes. Inside the post store, we evened the score by asking him questions—about the stock, the Indian customers, method of trade and many others that he answered willingly.

Mrs. Mildred Heflin, Indian trader and owner of the post, entered the store from the adjoining room.

"Come into the living room," she said.
"It is cool here. Sit down and rest while you make plans for your stay here."

She was a gracious, intelligent and beautiful white woman whose deep-voiced, flawless English was a pleasure to hear. When she spoke Navajo she gave it the wings of song. Her living room was cool. The adobe walls were more than one foot thick and the floor was made comfortable with many beautiful Navajo rugs. Ice water and ice-cold "cokes" were served.

Thus refreshed we went back into the store. Here the business of the post is carried on. Sitting on the "board of public works," or loafers' bench, we felt like extras on a movie set while watching the characters come and go in the best "horse opera" I ever have seen.

Navajo Charlie rode up. He painfully dismounted and hobbled into the post on crutches. After an exchange of greetings all around, he pulled up his pant leg for all to see his swollen knee. With Mrs. Heflin interpreting, we learned that

Charlie, after the trial at Monticello, had walked back from there to Oljato, over 100 miles. His duty had been to be at the trial in support of his friends and so many were there that the transportation problem had left Charley a derelict. He walked home and now, what medicine could he buy? All present recommended and prescribed—we joined in. Charlie's final purchase was a bag of candy and a bottle of strawberry pop! And that, with our sympathy, I am sure was "good medicine."

An especially bejeweled and colorful gent allowed us to examine closely his rings of silver and turquoise. We expressed much admiration and then my ring was modestly displayed. Frank valued and observed, "Ahk-li-dok-lish" (dime).

"Klee-tso" (nickel), said Mr. Tiffany. I put ring-fingered hand in pocket.

The next scene was like one in the play, "The Dove" in which a character comes up stage and says, "I am de bes



Lincoln Phillips . . . ten years old.

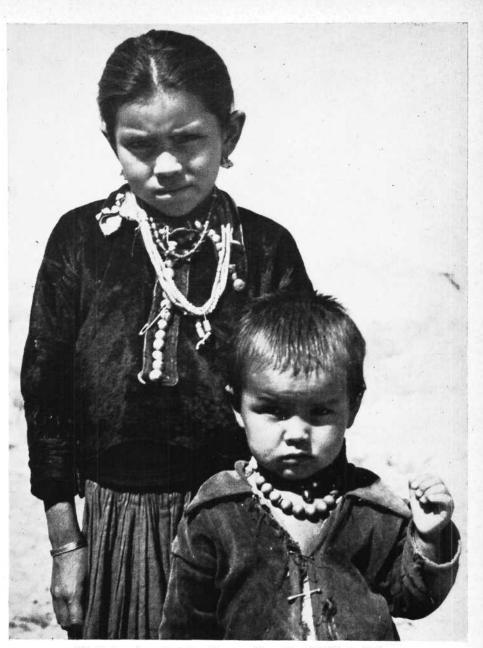
damn caballero in all Mexico!" A large heavy, twinkling-eyed old man strode into the room, surveyed the assemblage and, though not speaking, in his very attitude said, "I am de bes damn Navajo on the reservation!" He shook hands all around and otherwise demonstrated a joyful mood. We learned he was about to become a father-in-law. The wedding was to take place that night, high up on the Douglas mesa.

Even then, out under the cottonwood trees near the post, the wedding luncheon was in progress. We walked to the spot armed with a large bag of candy and joined the tea party. Elmer poured. Elmer was a tall thin Navajo and non-committal with all his 20 English words. They were the upper crust, had much fine turquoise and silver and one young and beautiful girl of about 20 years wore, where bustles used to be worn, a beaded purse. The awkward position of the purse belied its utility value and made plain the fact that it was worn to let her sisters know she was "in the money."

Each guest had his mount tethered nearby. The harness was as nondescript as the



Four of ten Phillips children.



Washed and combed for picture taking. Dan Phillips' children.

horses' lineage. Three carried finely made and very old Spanish saddles, though one had stirrups made from a modern English saddle.

We had been instructed at Mexican Hat, by Mrs. Norman Nevills to buy if we could, two sheep—butchered. Bob, the post assistant, helped us to try to persuade Elmer to get them for us. Amidst the gayety of the wedding luncheon was the wrong time to bring up a business proposition. The men of the Navajo tribe do not own the sheep. They belong to the eldest daughter and in that case Elmer would have had to ride out to some herd, consult the shepherdess and then do the butchering which was altogether too much to expect with a party going on.

We quit the party and made our way back to the post buildings just as Dan Phillips rode up. He almost had been forgotten. After Frank introduced Win and me, Dan expressed his pleasure that we had come to visit with him and his people.

"I am glad you have come, Frank, and brought your friends," he said. "Now I want to do something with you guys." He invited us to the wedding. Such invitations are not passed out readily and we were overwhelmed but unable to accept. After much questioning about time, which Dan thought very unimportant, we learned that the balance of the day would be required for the trip on horseback to Douglas mesa. The wedding ceremony would occupy half an hour and feasting, singing and dancing would go on all night. Next day would be needed for the return trip. We had left Mexican Hat with the understanding that we would return by seven that night. If we didn't come in by eight a searching party would be sent out for us. We decided no wedding party for us! Dan insisted then that we visit his home. The experience was a very satisfying substitute for the wedding party.

We drove the car ten miles up the Oljato wash, dry in the summer but a river in the rainy season. Definitely we were off the beaten path!

Dan's home was just out of the wash

and his property consisted of a small corn and melon garden and two houses or hogans—a summer shelter and the more permanent mud house. It was delightfully cool in both. The permanent house was made with a circular floor plan. From its circumference, large cottonwood poles were caulked with red clay. That is a complete description of the simple construction.

The furnishings were just as simple. There was an old style iron stove in the center of the room with its pipe reaching almost to the opening in the center above. There was a wash board, a few pans, many Navajo blankets and an old trunk full of trinkets such as clutters any house.

The summer shelter was of much the same plan but made with smaller limbs of the cottonwood with the branches and leaves left on and smaller branches intertwined to make an effective shade from

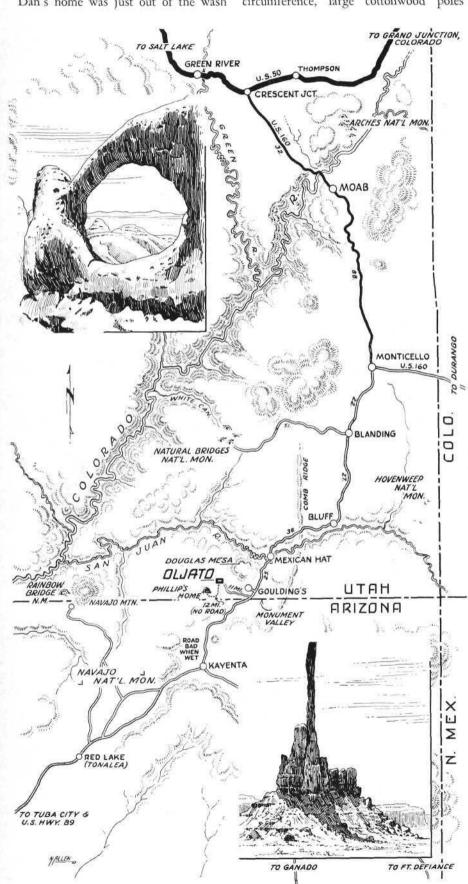
We went first to the permanent mud house. There Dan exhibited the family album. There were pictures taken at the time when a delegation from the reservation had visited the White House in Washington and several others, carefully preserved as reminders of past events. Now there is added to the collection prints of my pictures of the family.

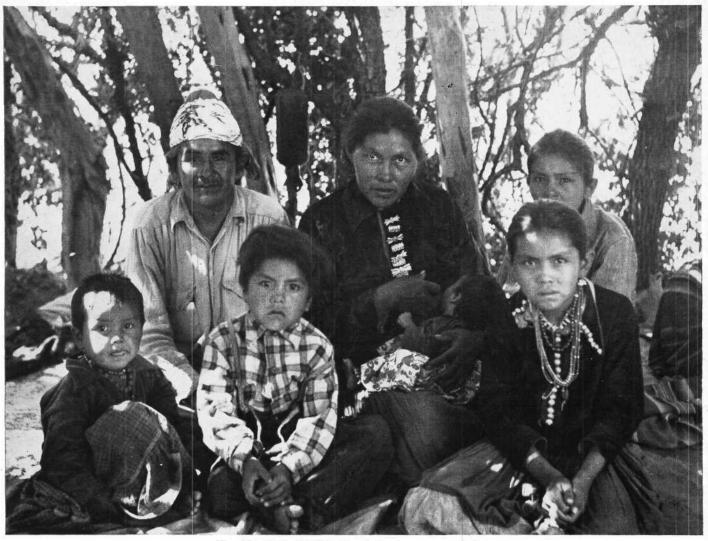
We examined saddle blankets and rugs, the work of Mrs. Phillips. It was like the sewing circle gushing over the work of a member. There were polite little giggles from the children as each of us tried to say the Navajo word for saddle blanket. There is a story that a missionary, troubled by the same word, invented the phrase, "The King has died in Italy" as being the best approach to the Navajo pronunciation of saddle blanket.

The subject of picture taking was broached. At a word from Dan, Mother Phillips and the children dashed out of the house and over to the summer shelter. It looked like it meant no pictures, but when we started apologies for our offense Dan assured us that there had been none and told us his brood had gone to "brush up" for the pictures.

Following the family to the summer shelter, we arrived to find shining new models for all the pictures we wanted to take. All the pictures we wanted to take was as many as we had film for. Lincoln was my favorite model. He is about ten year old and bright as a new penny. Dan's letter quoted above shows evidence of Lincoln's thirst for knowledge and the hero worship of his Dad. He is all boy with a grin a yard wide . . . or nearly!

After the picture taking, we sat in the summer shelter and talked. Dan and his wife have ten children. Five were at home, a six year old girl was out with the sheep and four were "away." The five sat quietly wide-eyed while we talked. Dan proposed a trip on which he would guide us. It would be with horse and packs across country from Oljato west to Rainbow Bridge. Such a trip was once attempted by a large museum expedition and the party returned unable to complete the trip





Dan Kinlichini Phillips family in the summer shelter.

after using more time than had been allotted for its completion.

Dan was ready to leave on the trip that afternoon. He said we could do as he often had done, then he explained what an Indian does when in our position. If he was away from home and the need of making a longer trip arose, he started the journey. Then the first person he met returning the way he had come was asked to deliver the message to his wife that he had gone away. She then was expected to expect him only when she saw him. To think that we could get away with that is the only un-American thing I know about Dan!

When we arose to go, Mrs. Phillips went to the doorway and was a most gracious hostess as she offered her hand in good-by.

Before entering the car, Dan called instructions to his wife and kiddies in Navajo. As he ducked into the car he said to us, "Isn't that the damndest language? Sounds like Chinese!"

In the wash again we were shown the plumbing for Dan's house. Dig two feet down in any dry wash and you will have a water hole with sufficient, fairly good water for culinary purposes. On many

drives through the Navajo country, seen less intimately from the car on the road, that water supply has been a mystery to

At the trading post again we bade



Be-jeweled father-in-law.

good-by to our new friends there, Mrs. Heflin and Bob. The Indians already had left on the journey to Douglas mesa and with regret we sped Dan on his way to join the wedding party. We began the trip home.

Very late afternoon was spent in Monument Valley before returning to Mexican Hat. We were late but in before eight and still in time for dinner with Doris-Mrs. Norman Nevills. Checking last year's river trip log led to speculation as to Norman's present position and to many river trip

adventure stories.

At midnight, with the moon full and directly overhead, we enjoyed the best swim ever. San Juan river, with its sand waves is not likely to become a bathing resort, but it proved a perfect place in which to end our day.

When he gave me his autograph for my portrait drawing, Dan explained that the "K" in Dan K. Phillips, was for Kinlichini, which means "Red House." That is the clan of which he is a member.

Win Cady, now a marine in the Pacific war area, Frank O'Brien and I, marooned in the city, hope to join again in a visit to the Kinlichini.



The old Wolverton mill (left) and cabin, at the foot of Middle mountain in the Henrys, 44 miles from Hanksville, Utah, nearest settlement.

Quest for Gold in Henry Mountains

In a remote mountain sector of Utah, Ed Wolverton toiled alone for 11 years to erect a mill which he believed would yield him a fortune in gold. He died before his dream was realized, but the old mill still stands, a monument to the ingenuity and perseverance of a good craftsman.

By CHARLES KELLY

PERSISTENT legend asserts that a rich gold mine was found in the Henry mountains in southeastern Utah by Spaniards shortly after Father Escalante's journey of discovery in 1776. Traces of their old workings are said to have been discovered and early Mormon pioneers claim to have seen a map showing its location. A number of men have spent considerable time searching for this lost mine, but so far without success.

After Mormons settled Hanksville, 20 miles north of the Henrys, in 1880, prospectors scoured the mountains looking for minerals, but their search was generally fruitless.

Some placer gold was found at the

foot of North mountain, one of the three main peaks of the Henrys, and nearby a small deposit of gold bromide. But lack of water has prevented profitable development of these claims.

About 30 years ago a small seam of gold bearing rock was found on Middle mountain and a mine was promoted, but values were low and development never went beyond the promotional stage. Not long afterward a man named Ed Wolverton came to Middle mountain, examined the gold showings and decided to build a small mill for reduction of the ore.

Wolverton was a quiet man who kept his business strictly to himself and for that reason it is difficult to learn anything about him, even from those who knew him. He once worked in Cripple Creek, Colorado, where he is said to have been a mining engineer. Later he came to the Henrys and tried to operate a placer property on Trachyte creek, but lack of water made it unprofitable. He went to Middle mountain about 1917, where he found gold showings which he believed justified the building of a small mill.

His experiences in Cripple Creek and elsewhere had convinced him that mine promotion schemes usually worked out to the disadvantage of the original locator. He determined to keep this mine for himself and his family. At first he had a partner named Gates, but when the latter insisted on promoting money to operate the mine, they dissolved partnership and Gates left.

Wolverton had little money, but he was confident the mine would pay good dividends eventually and he didn't want to divide profits with stockholders. So he decided to operate alone, with the help of two sons. They opened a small tunnel far above timberline, and carried the ore on their backs or on sleds down to a small stream at the foot of the mountain. They built a small arrastra of hard trachyte rock to grind the ore, dragging a heavy stone round and round by man power. From the sludge they recovered some gold, but not in paying quantities.

Wolverton was satisfied that his mine would be profitable if ore could be handled in sufficient quantity. He decided to build a small mill, to be operated by waterpower from the little creek. He had no money to buy equipment, but he was a good mechanic and engineer and went to work constructing the mill himself from native materials at hand. First he cut big pine trees growing in the canyon, and with the help of his sons sawed these logs into boards by hand. This was a slow, back-breaking process, so when he had sawed sufficient lumber he built a small waterwheel and cut his lumber by water power using the old straight hand saws. This also was a slow process, but was much easier than sawing by hand.

With the lumber from his little sawmill, Wolverton then began construction of his mill. First requirement was a water wheel to furnish power. When it was finished he built his mill around it, then constructed a crusher, an arrastra, a conveyor and other necessary machinery, practically all from native materials.

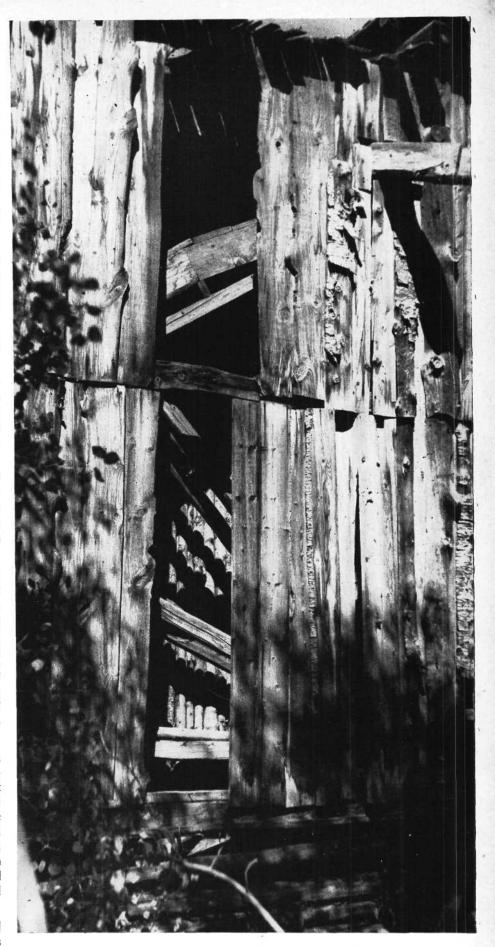
This construction work necessarily required a long time, during which little or no gold was mined. His sons, impatient at such slow progress, left him to find more profitable employment elsewhere. Wolverton and his wife were left alone.

After another year of loneliness, his wife also left. But Ed Wolverton was a persistent man and he still had faith in his mine. He continued working on his mill, and finally finished it after 11 years of almost solitary labor.

Last September I rode 12 miles on horseback from Trachyte ranch to see the old Wolverton mill on Middle mountain, and found the trip well worth the effort. It stands close to the base of the mountain near the head of Straight creek, a tiny stream of good water. Because of this water the canyon contains a heavy growth of timber, mostly yellow pine and aspens. After passing through so many miles of barren desert country it seemed an unusually beautiful spot.

I found the old mill just as Wolverton left it 14 years ago, a masterpiece of ingenuity. Its roof, covered with shakes cut by hand, was still sound and watertight. Inside was a crusher and an arrastra. The crusher consisted of a heavy iron wheel running in a groove of hard trachyte rock. The arrastra was a wooden tank in which a heavy rock was dragged round and round. It had been carefully constructed and appeared still watertight.

But the remarkable feature of the mill was the water wheel which furnished its power. It was 20 feet in diameter and about two feet wide, almost entirely enclosed in a narrow room of its own. The



A small section of the 20-foot waterwheel, all made by hand, may be seen through the wall where the boards have fallen away. Abandoned 14 years ago, the wheel still turns with perfect precision.

wheel was an overshot bucket type, with more than 100 V-shaped wooden buckets. A wooden conduit carried water to the top of the wheel from the creek above.

Every part of the great wheel except its iron axle had been carefully fashioned by hand out of native timber. The buckets were made of sawed boards, neatly fitted together. They appeared to be still watertight. After having been abandoned for 14 years I wondered if the old wheel would still turn. Pulling on one of its huge spokes I found that it not only moved at the slightest touch, but that it was perfectly balanced. Spinning it round and round I was amazed to find that the outer diameter of the wheel was in perfect alignment, running as even and true as though it had been made of the finest materials in a well equipped shop. As it turned there wasn't a groan or squeak from a single

To transfer power from wheel to crusher and arrastra, Wolverton had made numerous wooden pulleys of various sizes, connected by belts. These were built up of sawed boards as neatly as any turned out by a factory. Except for a few hundred pounds of iron, he had constructed every part of the mill and machinery himself. The amount of careful labor which went into it was amazing.

There was evidence that the mill had been operated and that it was capable of doing the work for which it was designed. But there was little accumulation of waste and no indication that any quantity of ore had been run. Charley Gibbons, who knew Wolverton as well as any man, says he never found out just what kind of pay streak Wolverton had, nor whether he ever made any money after the mill began operating. He is of the opinion that results were disappointing, but no one ever knew.

Deep snow on the mountain made it impossible to work the mine in winter, but Wolverton usually spent his winters alone at his camp. At that time Gibbons had a ranch near the base of the Henrys and it was Wolverton's custom to come down to Gibbon's ranch about every four weeks. Once, when he failed to appear, Gibbons sent one of his sons to see if the old man was all right. The boy found him sick—so sick he had been crawling on hands and knees to the creek for water. Riding back to the ranch the boy got help and the old man was taken out to a hospital in Price, Utah. He failed to recover and died within a few days.

That was 14 years ago. Since then several men have hunted for the "lost Wolverton mine," but never found gold ore that would pay a profit. The old mill still stands on Middle mountain, almost hidden in a grove of young aspen trees, just as Ed Wolverton left it, a monument to his 11 years of lonely, painstaking labor.

TRUE OR FALSE

If you are saving gas for a weekend trip, here's a suggestion for spending an evening at home—and liking it. Make quiz

night Contest Night, with awards to those who qualify as Desert Rats and Sand Dune Sages. Ten right answers make you a Desert Rat, 15 or more right answers qualify you as a Sand Dune Sage. Even if you don't win a prize, you'll learn more about the Southwest's history, its plant and animal life, its minerals, geography and Indian lore. Answers on page 25.

- 1—Tarantulas, those great hairy spiders found in the Southwest, are deadly poisonous. True...... False.......
- 2—Herkeimer diamond refers to a low grade diamond. True...... False......
- 3—One of the waterfalls in Palm Canyon near Palm Springs is 60 feet high.

 True...... False......
- 4—Mormon colonization of Utah started before the gold rush.

 True...... False.......
- 5—All evening primroses bloom at night. True...... False......
- 6—Desert tortoise is hatched from an egg. True...... False......
- 7—Cahuilla Indians were using woven nets to catch fish in Salton sea when General Kearny crossed the desert with his Army of the West.

 True...... False.......
- 8—Bingham Canyon, Utah, is noted for its copper production.

 True....... False.......
- 9—Kiva is an underground ceremonial chamber of the Southwest Indians.

 True...... False.......
- 10—Town known as the "town too tough to die" is Las Vegas, Nevada.

 True....... False.......
- 11—Organ Pipe national monument in Arizona derives its name from a rock formation within the area. True....... False.......
- 12-There are islands in Great Salt Lake, Utah. True...... False......
- 13—Of the only four states which meet at a common corner in the United States the northwestern one is Utah. True......False......
- 14—Ann Axtell Morris' book "Digging in the Southwest" tells about rockhound expeditions. True...... False.......
- 15—Pima Indians of southern Arizona had no calendar. True...... False......
- 16—Fluorite occurs in pale violet colored crystal formations.

 True....... False.......
- 17—Santa Fe Trail was in use before Butterfield stage line was established.

 True...... False.......
- 18—Bill Williams river is a tributary of the Colorado river.

 True....... False.......
- 19—"The Out Trail," account of the author's experiences in the Southwest, was written by Mary Austin. True...... False.......
- 20—Name of Kofa mountains in Arizona derives from type of geological strata found there. True....... False.......

A San Diego artist who had become intrigued by the Marshal Souths' experiment in living went to their abandoned Ghost mountain home "Yaquitepec" this past spring to transfer to his canvas something of the spirit and substance of that mountain top home. He has described for Desert readers his experience during three days of sketching and painting. Both his story and painting have captured a beauty and spirit and pathos which linger about the little home which took ten years of patient arduous labor to create. Marshal South, who read the first draft, wrote from Utah, "If it gets under the skins of the readers as it got under ours it ought to prove a wonderful hit."

Pilgrimage to Yaquitepec

By THOMAS CROCKER

O TRY to catch on canvas some of the color of Marshal South's "Desert Refuge" long had been in my mind. But when the South family left their mountain top nearly a year ago the plan was abandoned. And with many others, I followed their wanderings through Marshal's articles in Desert Magazine, hoping to learn that the Shangri La they sought had materialized.

Then last April the idea of painting Yaquitepec began seething again. Why not go up and paint it still. Why not preserve even now a bit of the color and substance of the dream that was theirs.

I drove from San Diego through the "back country" to the jagged east slope of the Coast range which overlooks the Colorado desert. At Julian Art Blank lent me his treasured camp stove, and Myer Ruby brought out an autographed copy of Marshal's book, "Gunsight." It was a tale of the West which had been published some time ago in England. Later, at the foot of Ghost mountain, that book added thrills to the evening hours in camp.

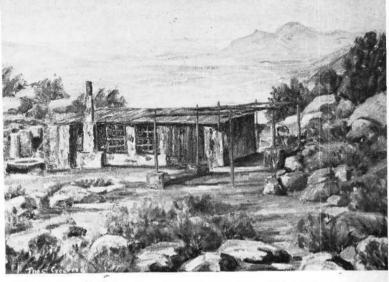
Beyond Julian at the foot of Banner grade I stopped at the Mushet's for water. They are charming people and ideal hosts for the lovely guest ranch they are building there—the Banner Queen. They provided a large container and a good supply of some of the finest water in the state—and the trek continued.

Through valleys and over bleak divides, around mountain slopes and across cactus flats, the trail wound on and on, to end at the base of Ghost mountain. There camp was pitched.

Next morning I started on foot up that burning trail with camera, sketch-book and pencils. It was steep and heavy going—and far—and hot. Up and up, past rocky ledges, over loose stones, by juniper and cactus, climbing and slipping, finally to round great boulders sprawled high on the summit, and come out on a breath-taking view of far hazy desert. And there, drowsing quietly in the sun—Yaquitepec!

I sought in vain for inspiration. All I felt was sadness—a sense of loss that this dear place had lost its builders and was slowly going back to desert. I sat about, unable to sketch, just looking and thinking.

South must have boundless energy. One climb to that eyrie nest among the great boulders, mesquite and desert cedar of his



Thomas Crocker's painting of Yaquitepec. One of the little cisterns may be seen at left. The sun dial is right of center.

mountain top would prove that. It was a herculean task to build that refuge away up there.

Every tiny bit of equipment from hinge and screen to tank and timber, had to be carried up over that precipitous trail where clawing cactus and jutting boulders contest every step.

The labor of building walls of earth, where no adobe is. The ingenuity of fitting everything that came to his hand into a snug and cozy retreat. The countless hours of effort recorded there!

The little cisterns to catch what water might chance to fall, the systems of drainage to steer each drop, bespeak dogged endurance. Cement and tar and metal drains and roofing went up there on his back. To make the climb once would be enough for an ordinary man.

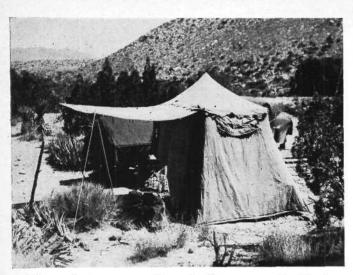
Browsing about among the mementos of those ten years, remembrance of the talks we'd had came back—discussions on philosophy and religion and art and society. Those talks helped me to understand his love for the natural, the limitless, the remote, the primitive. His way of life, so different from a regulation mortal's, gained new significance as I pondered over his experiment in the Art of Living.

Down by the camp was a land of immense quiet, long still shadows, unbelievable peace. On Ghost mountain, the immensity was multiplied a hundred fold. Below, a long vista extends north to the Volcan peaks, the only long view there. Close back of camp—Ghost mountain. To the west, hemming it in, the Laguna mountains. And to the east, the desert ranges rising high and close. But on the mountain top no ranges shut one off. To the north and south and east and west, the sight and mind can leap the leagues of distance into the blue haze of desert, the far reaches of Mexico, the western resting place of the sun, and on and on into the north until imagination fails.

It was easy to understand how they could love a spot like that. Every hour different with the swift changes of light and shadow, of mist and clarity. Every day different as seasons rolled along. It crept into the soul and changed the little into the great. It emphasized the immensity of our earth and the vastness of the universe, the littleness of a single man, the wonder of man's mind. Anyone who has read Marshal's prose or Tanya's poetry, can see how the breadth and beauty of it have entered their very marrow.

It must have torn them to go. Every inch of wall shows the impress of their molding. Every stick of the sparce furniture they had to leave, every improvised hinge and catch, and shelf and opening, show their patient handiwork.

The little bird-houses set so daintily in tree and bush, the



The author's camp at foot of Ghost mountain. He is reading Marshal South's book "Gunsight."

sun-dial shadowing the quiet hours around, the tiny hut nearby where Marshal was wont to work at his writing. A discarded toy or two, mute witnesses to the child life that blossomed there. The goat-pen of whitened yucca stalks. Bits of pottery they made. A painting or two he left behind.

The little cisterns were almost completely dry. Some water in the larger ones was stagnant and unscreened, catching the unwary centipedes and other thirsty animites. A swarm of carpenter bees found just about enough to tide them on their way to work. This would have been a bad year if the Souths had stayed, for almost no rain had fallen on Ghost mountain these many months.

Gradually the quiet and beauty won. The sadness melted. A picture began to form in my mind, and a plan for sketching. The front of the little lodge must show. But the most glorious view of all—far off across the desert—lay behind, when one faced the lodge. So exercising a painter's rights, my pencil shamelessly turned Yaquitepec quite full around. Now, facing both the lodge and the desert, there emerged the right impression. An artist tries to bring to his canvas not a photograph, but a composite idea of beauty as he sees it. And yet, looking at the picture, I doubt if this deception will bother, for that is the impression one really catches there—the coziness and interest of the little lodge, and the glory of the far flung desert.

When this interpretation had pretty well worked itself down from mind, through pencil lead, to sketch pad, the day was beginning to pull down its shades. Blue shadows were stretching yawningly across the valleys. The very quiet became more quiet still. Then a good meal, a comfortable camp chair, and Marshal South's book.

The next day the real painting began. Back up the trail with canvas, easel, paint-box and bag. In the shade of the ramada, I laid in the general plan of the sketch with a small sable, in soft blues and browns. Then, with back to the lodge, distance, mountains and desert crept into life, with the warm yellows and blue-greens of the sky, the soft blues and nearer purples and browns of mountains, merging into the peach-yellows, purples and buff of the desert.

Turning about, with back to the desert, perched on a giant boulder to the east of, and above the lodge, the soft greys of its roof, the warm rose and whites of the 'dobe, the merging greens and orange of the wood, and varied "deeps" of the little window panes were born. The juniper trees in their exquisite greens, their deeper blues and lighter olives, began to nestle with the sage and greasewood brush, among the multicolored

boulders. The sun-dial took its place, and to the left the little cisterns joined the hill behind, backed with rock and fringes of green. The slender poles of the ramada were just suggesting themselves when night came on and work had to stop.

The evening was as quiet and wondrous as the last. More of South's thrilling story. And vague hopes that the painting up there on the summit, would take sure shape and finish on the morrow.

And so it did. Most of the day was spent working for misty distances, blending the coloring of sky and desert and foreground, laying in the shadows and strengthening the foreground details.

Never satisfied, but happy in a purpose accomplished, I cleaned the brushes, packed the equipment, and shouldering the easel with screwed-on canvas, took the last descent down that dear, hot mountain. Dear it was because of the Souths. Hot and forbidding and bleak without them.

Camp soon was broken, and everything stowed away. I stood quietly for some time, gazing back up that winding trail, my mind visiting again the little lodge tucked off up there. I doffed my hat to gallant adventurers. Always will I carry with me the memories of a wonder-time on that lonely crest, renewing in spirit my touch with the Souths, and living for a while with them their life at Yaquitepec.

DID YOU GET A REJECTION SLIP? . .

Each month hundreds of manuscripts are submitted to DESERT. Only a few of them are acceptable. For the information of writers, here are listed some of the reasons for rejection:

- l—Lack of good pictures. Clear well composed photographs are as important as well written text matter in the editorial program of DESERT. Prints accompanying manuscripts must have strong contrast for halftone reproduction, should be on glossy paper at least 5x7 inches.
- 2—Outside the field. DESERT is for the present limiting its feature material to desert areas of the Southwest—New Mexico, Utah, Nevada, Arizona, and the Colorado and Mojave deserts of California.
- 3—Lack of human interest. DESERT is not interested in straight factual or essay type of material. All subjects whether on science and nature, history or travel, must be treated in a personal human interest style.
- 4—Too large a field. A writer attempting to cover too large a territory or period is likely to make his article too generalized and impersonal for DESERT'S requirements. A better choice is one incident or one individual, personalized and dramatized, rich with colorful human details.
- 5—Lack of familiarity with subject. Being a clever prolific writer is not sufficient. DESERT'S writers must be intimately acquainted with their subjects from personal experience. Manuscripts should be written from the point of view of a participant, not that of a spectator. They should emit a glow and sparkle and liveliness which will give the reader the effect of a genuine experience—of meeting desert people, of discovering some remote ruin, of taking part in a thrilling episode of history, of finding rare specimens of plants or gems.

6—DESERT is not in the market for fiction. Only contributed poetry is used.

A writer, before submitting material, should make a careful study of the type of material and the writing style used in DESERT. If in doubt as to acceptability of your material, write the editor. Such inquiries are welcome.

True sons of the desert may not like it but a western formula developed by Clarence Budington Kelland has been a potent force in publicizing the Southwest country. Oren Arnold gives us a close up view of the author of Scattergood Baines stories who a few years ago "went desert" in a serious energetic way. He bought a home near Phoenix, Arizona, and promptly started to turn out one novel after another telling the country at large about the adventure and romance still to be found in the desert

Scattergood Discovers the Desert

By OREN ARNOLD

A lovely eastern girl inherited a ranch on the Arizona desert. She came west to run things, and two gents fell in love with her. She married the gent with the quickest pistol and the fewest buck teeth-then faded with him and the saguaro cacti into the sun setting in Skeleton canyon. The End.

HAT beautiful formula has done more to publicize the desert country in the past 10 years than all the desert chambers of commerce combined. It is the plot pattern used by Clarence Budington Kelland, highest paid author in the world.

Whether or not it is a "good" formula is beside the point. It is good for Kelland. And it is good for the desert. With variations, it has been written, broadcast and screened so many times that all of us Americans should be sick of it. We aren't. It was an old plot when Kelland was born, and it will be new when he dies. We Americans like to see the lovely girl triumph with her hero, and we especially like to see the picturesque desert land, which is naturally keyed to adventure and romance.

Bud Kelland can turn out three novels a year and do a lot of short stories, radio talks, politics, horseback riding, and loafing, on the side. He is not a desert citizen by birth or rearing. In fact he started his personal and professional life away back East, began writing nearly 40 years ago on the once distinguished American Boy magazine. He created Scattergood Baines, a Vermont philosopher. He did a lot of miscellaneous romance.

But he didn't-by his own admission-get his journalistic stride until he discovered the desert. And that happened by accident. He was rolling from civilization to California (a New York neighbor said that!) when his trailer house broke down in that wild western region called Arizona. For several hours he had to wait there amid loneliness and prickly pears. A rancher rode by looking for steers.



Clarence Budington Kelland put his spurs on upside down. He is caricatured by his cartoonist friend Reg Manning.

"Good afternoon," Mr. Kelland greeted. "Howdy, pardner. Nice day."

"Yep it is. Say I want to know something about this country. I am Clarence Budington Kelland."

'Um," grunted the rancher, "right smart stretch of name, stranger. What do yore friends call you?"

The distinguished author swallowed. "Bud," he said then, grinning.

"All right, Bud. Mine's Ike. Ike Bane. Now this country is a great place for either cows or minin'. Me, I'm in the cow business here, you want a cigarette makin'?-because they are more shore. A man cain't eat a gold mine he don't find, but I can always manage to eat my own beef if I have to. Hanh?"

That was enough! Two smart men, each salty and wise in his own way, had all they needed in common. They didn't stay strangers long.

Bud eventually came on into Phoenix, and walked around



"Bud" Kelland at his Phoenix home with friend Rosemary and dog Tip.

down town. Several people in the banks and the hotels discovered he was Clarence Budington Kelland—but not a doggone one fell over himself begging for autographs! Nobody gasped and looked at him with awe. Yes, they knew about him. Kelland, the famous author. What of it? Looks like a good egg. Lots of good fellows come out here. How do you do, Mr. Kelland; make yourself at home.

It was a new live-and-let-live sincerity. He hadn't expected it. These Westerners, these desert folk, just didn't give a whoop how important he was; they liked him because he was likeable. So Bud Kelland promptly bought himself a \$50,000 home near this desert town of Phoenix, and he expects to grow old gracefully and die there.

It wasn't many months after that when the Saturday Evening Post burst out with the first of the famous Arizona trilogy in fiction. It was a serial called "Arizona." The girl this time was even more impossible than his heroines usually were and more lovable. She baked pies and she swung a blacksnake whip—remember? The Post circulation jumped up. The book version of the story sold fast. The motion picture was filmed on the open desert near Tucson—in the grandest set ever created out of Hollywood, a re-creation of historic old Tucson, adobe walls and all.

Next one was about Prescott and third one about Phoenix, the same plot retold with new details, the same general setting. Again they clicked high everywhere. The Post ballyhooed them on its cover. The screen called them epics, which they weren't. The public loved them. "Valley of the Sun" was the Phoenix story, and it was partially true. It got Mr. Kelland in good with the citizens of his new home town.

Since then he has done several other desert stories—nobody ever tries to keep up with his titles, because they come too fast—

and all of them have ranged toward best-seller class. As recently as 1940 Bud Kelland was rated by the profession (as reported in Writer's Digest) as the highest paid author in the world, and 90 percent of his output was concerned with the desert. He sees in every storied hill a new setting for his romance. He reads a bit of history about an old mine, a picturesque rancho, a wagon train, an Indian raid, and goes to his workshop out back of his residence. He types for three hours, then rides a horse on the desert nearby. Next day he types some more. That's all the "inspiration" he seems to require.

Bud Kelland is no arty author. His stories lack the pompous importance of Zane Grey's westerns, and because of that is probably closer to real literature than anything Grey ever wrote. Kelland's novels are sassy, pert, cute; never heavy or profound. Dialogue is as rich and spicy as a high school girl's. Philosophies are elemental and sound and so simple that Ike Bane can understand them, are in reality Scattergood Baines' reasoning redressed for desert use. In short, Kelland stories are not the enduring classics we might like them to be, but they are tops in entertainment. That's all their author ever has claimed for them. That's the only goal he has ever set.

As a craftsman, he is good enough now never to rewrite, edit or even read his own stuff. (Among us lesser hacks, that fact will be phenomenal.)

"At nine o'clock each morning I sit down at my typewriter," says he. "I put in a clean white sheet and three carbons. I pause a moment, and then I begin to type.

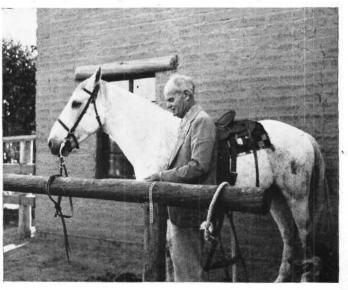
"By 12 o'clock, almost invariably, I have done about 1,000 words. That's where I quit for the day. One thousand words a day is enough for any writer. That means 30,000 words a month. That means a novel complete in two months, or a little more.

"I do not bother to read what I have written. It is not necessary. I do not edit my own stuff, nor have any one else do it. I do not even have it copied. If some young squirt editor back east wants to change a word or two, it's up to him."

Actually, the young squirts don't bother. Bud Kelland has them all bluffed, has editors begging him for manuscripts night and day at his own rates—which automatically makes him the patron saint of all other writers, who have been slaves to hope and revision!

It wasn't always like that with Kelland. And in this lies the inspiration for us all. His career, no less than Lincoln's and

Kelland has Blue saddled, ready to take off on his morning ride after turning out a thousand words of a novel.



any other rags-to-riches man's, started from scratch. About the turn of this century, 25-year-old Buddie Kelland had been striving to sell fiction for seven long years before one story finally clicked. An editor paid him \$7.50 for it!

He spent the next six months in celebration, went back to work and eventually sold a second yarn for \$10. Since then, some statistician has estimated, Americans have spent 10,000 years reading Bud Kelland stories. (Figuring the average time to read the average story, by the average number of readers of magazines in which his stories appear.) Many more aggregate centuries have been spent by us Americans looking at his stories on the screen. In his 60's now, his production is still amazing, and demand for his work is greater than ever. There's no guessing what sort of desert romance may pour out of his agile brain when he turns loose on desert army camps, aviation centers and the like. The war situation is bound to influence him.

Now with such a phenomenon as that publicizing the desert —what is the desert people's opinion of him? Do they approve of him? Do they like him personally? Does he "belong?"

To the latter question, the answer is yes and no. He offended a great many folk by being superficial in his historical novels of Arizona. It was a justifiable offense—most of us feeling that some great (which is different from popular) writer could have made "Arizona" as distinguished a novel for the West as "Gone With the Wind" is for the South. Answer to that, however, is that the gate is still open. America has known only two truly epic periods of history, the ante bellum South and the Wild West. Margaret Mitchell did the former in her incomparable novel. Who among us will do the West?

Kelland is regarded as an eccentric now. Which means he has to maintain a sort of crusty guard against pests who bedevil

him to read manuscripts and to speak to the ladies' society pink tea. He is not tough, or hard to talk to. He is exceedingly fond of children. He loves horses, dogs, and wild critters that bark and yap and scream in the desert nights.

His idea of a good time is to play a round of golf with some salty friend like Guy Kibbee, who plays Scattergood in the movies, then go for a desert horseback ride. Often he rides alone. He may just sit out on a desert rock and think—or, as the feller says, just sit. It's a pretty good form of recreation.

Any famous author is held to be wise, and perhaps that is so. This wise Mr. Kelland, then, admits in formal interview that life is sadly confusing, and that he isn't sure what he'd do with the U.S.A. if somebody thrust a dictatorship into his lap. He will occasionally venture a generality or two.

"Work, work, work!" he almost shouted at me once, when I asked him how to prevent unemployment. Work to prevent unemployment? It calls to mind another sage observation made by another wise man; Calvin Coolidge himself once said, "When a great many people are out of work, unemployment results!"

But when he isn't dodging, Bud Kelland does better. "I think we grew into a spoiled-brat nation," said he, on another occasion, "because we had too much luxury. Luxury is enervating. When the reaction set in, we soon had thousands of people floundering around like cry babies, and eventually we had to face a war because of it.

"America wasn't made in the first place by whiners. It was made by pioneers who felt not that the country owed them a living, but that they owed the country a living."

And that statement ought to bring nods of agreement around anybody's campfire.

WATER AND POWER

. . . both the people's

- Water is everything to Imperial Valley. It makes the difference between a barren desert waste and a fertile, green, agricultural empire.
- But water flowing into the valley through the confines of the great All-American canal is doing more than making possible the production of millions of dollars worth of vital farm products. It is turning turbines at two huge hydro-electric plants on the All-American canal and creating a byproduct — Electricity — to light homes and turn the wheels of industry in Imperial Valley.
- Both water and power belong to the people. Diversion of water, generation of power, and distribution of both are handled by the Imperial Irrigation District, a cooperative utility—owned and operated by the people of Imperial Valley. Revenue from the sale of this power will pay for the All-American canal which in turn has assured for the people a safe and certain water supply.
- Thus do the thrifty people of this unique and vastly productive valley make full use of their God-given resources and insure the future of this miracle land which is helping to feed the nation.



LETTERS ...

Geodes for Everybody . . .

U. S. Naval Air Station Atlanta, Georgia

Dear Sirs:

I was really pleased with Jerry Laudermilk's article on "Geodes and Thundereggs" in the May issue.

These days one rarely finds an article on mineralogy written so cleverly that it satisfies both popular and scientific minds.

The author surely went out of his way to please the popular readers and those among them whose interest is confined to cutting, polishing, and admiring.

I trust that Jerry will, through your pages, continue to captivate this group, give them a new horizon, and thus increase their stature as scientific interpreters of the minerals and rocks they collect.

Incidentally, I enjoyed seeing specimens in two dimensions from my own collection. It's really a treat when you're away and can't enjoy them in three!

LT. M. P. YACKEL, U.S.N.R.

Wants More "Stone Autographs" . . .

Willits, California

Dear Sir:

I wish to thank you for the article "Autographs in Stone" by Charles Kelly in June issue of Desert. This is the most interesting thing I have seen in the magazine and would like to see more about Mr. Kelly's hobby. For instance on page 11 he speaks of a trail being laid out in '58 and it would be interesting to know who and how about laying out the old trails. As regards the Desert Magazine I can safely say I have never found a dull piece in it.

CHAS, H. WALKER

Likes Desert Women's Hobbies . . .

La Feria, Texas

Dear Desert:

Your magazine is like a breath of fresh air. It makes me want to spend the rest of my life out among the mountains and canyons and valleys.

I do so enjoy articles like "Rattlesnake Skins Are My Hobby" and "There's Bees in Them Hills," written by women. It proves that women can be resourceful, and I admire to the bottom of my heart those who have the courage to do what they want to do.

Although my field trips are over for the duration, I yearn for more thrilling tramps in our hills and valleys for agates, fossils and plant life.

EULA M. FERGUSON

Indian Stories Confuse Writers . . .

Whittier, California

Dear Lucile:

Just a comment regarding Julian Hayden's letter in June issue about Mrs. Muench's Papago story. Knowing Julian for many years, I am sure of his sincerity in making the criticism. Both he and Charley Steen are professional anthropologists and their work at the shrine was definitely scientific.

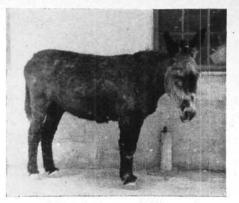
There have been "beefs" on my stories, too. My facts were okay but my slant was different as well as information received from the Indians. Indian stories are the most variable thing in the world. Washington Matthews, Alexander Stephen, Underhill, Kluckholn, Mrs. Newcomb and many others all have recorded versions of the Navajo origin. And in my work I have recorded three different versions as told me by three different "singers." While the patterns remain the same, the variations come from the interpretation of the storyteller, faulty interpretation and the particular rite-myth pattern being followed.

No one more than I realizes that writers working on Indian material must work like the very fury to dramatize their material to make it both reasonably authentic as well as dramatic.

Anthropologists work with material as close to fact as they can humanly get—they become tartars on accuracy, for they are forced to. When one wears out his brain on fragments of an ancient story from a half-senile old Indian or goes almost blind working with fragments of material recovered from excavations he is not very romantically inclined. But—for years I have preached that anthropology will never reach its right status in American culture until it is so interpreted that it is understood and utilized by the public.

If Mrs. Muench has stuck to facts as she got them and has written them, as such, that is her version. On the other hand, if she has completely missed the pattern of the shrine and its use, she should have checked her information with a second or third informant. This is a kindly suggestion from one who has been loaded with bum information for years—and oh boy, did I have to start revamping notes after I was with the Navajo and started to get the language and feel of the people well enough that I could solve some of the ambiguous statements given me as fact. One has to use a double fine mesh strainer to get Indian stories and traditions-and even then you have only the version of the individual telling the story.

RICHARD VAN VALKENBURGH



Old Ned, 43-year-old burro of Cottonwood, Arizona.

West's Oldest Burro? . . .

Tempe, Arizona

Desert Magazine:

I am enclosing a picture I took of Old Ned, 43 years old, the black burro familiar to every Cottonwood, Arizona, resident. The greying old burro, who belongs to Charley Willard, roams Cottonwood's streets at all hours and in all stages of repose. He even is seen occasionally standing in the middle of the main thoroughfare fast asleep.

I am wondering if he may be the oldest burro in the West. Statement in the Arizona (Phoenix) Republic newspaper that he is the oldest burro in the state of Ari-

zona remains unchallenged.

STAN SCHIRMACHER

Trade Rats Won't Trade . . .

Crescent City, California

Dear Editor:

Enclosed is clipping about a wood rat with the statement that it always leaves something in exchange for what it steals. I lived in Arizona a good many years and have had many things carried off, but I never found anything they left in exchange.

One time when I was running a hoist at a mine I dropped a wrench down a crack in the floor and had to pull up some boards to recover it. The men had missed cakes of soap, combs and little trinkets from their lockers, and the foreman was always complaining about candles missing, had even fired several Mexicans and Italians suspected of stealing them. But when I went under that floor I found it all. There was a box of candles piled up just like a box had been dumped out.

Another time while papering a room I tore down the cloth ceiling and found a big nest that had in it everything imaginable, including a small diamond ring which the owner said had been missing two years. If the rat ever had left anything in its place she had never found it. Nor had they left anything in return for all the other loot recovered. Maybe some leave an I.O.U. What do you think?

CALVIN M. BASS

Rockhound in Hawaii Dreams . . .

Honolulu, T. H.

Dear Friends:

Have just been reading Desert. Only thing wrong, it's given me more spring fever than ever . . . Anyway, reading it was like a good tonic. Read about one of the rockhounds who goes in for tonnage also. I know how that goes. I remember all the rock I used to load in. Just let me once more see those hills, and I'll show you what a real rockhound can do. In fact, tonnage won't be in it; I'll go in for trainloads!

Just as soon as this is over, I'll hit the trail and won't look back until I have the Pegleg mine or the Lost Dutchman located. As I look down the trail into years ago, it seems a sky bedecked with a million stars. The wind's in the pines and the fire's burning down to red embers. And trailmates bring in new clues to rich ore. But the trailmen hunt and the trailmen sweat—and the Lost Dutchman and Lost Pegleg and Lost Nigger remain just mystic mines of gold.

Men dream of them when the snows are deep, then in spring go again, saying, "Yep, this year we will find her." But into the mists of the years they come and go—just tales of the rockhound trail. They are real in the minds of the men who seek, but are given only as health, happiness and hope. And I guess, after all is said and done, it is the gold of the sunset and the purple of the dawn that really are the "lost mines" of the desert. Some day I hope once more to be where the western skies at evening time turn to a beaten gold —looking and seeking as of yore. The Lost Dutchman? Yep, I know she's there, I've seen the ore, just like butter in a hot fan.

PVT. JACK O'BRIEN

Likes Kelly "Autographs"

West Los Angeles, California Dear Mr. Henderson:

I have read more than a fourth of all Desert Magazines all through, and I haven't found a dull, dry or uninteresting story in any one of them.

I read with interest Charles Kelly's article, "Autographs in Stone" in the June issue. I had often wondered if someone was preserving the history written on the rocks of America—and it seems that Mr. Kelly is doing it.

I know of one autograph dating either 1860 or 1890 (I couldn't decipher it) on a tree at the Oaks camp ground on U. S. Highway 6, about 45 miles from Los Angeles. The inscription is in the upper part of the grounds above the Golden Rod lunch room, on the first branch of a large oak tree.

DAVID CHAMPION

For 8-Year-Old's Education . . .

San Diego, California

Gentlemen:

Enclosed please find my check for renewal and also check of my neighbor for a new subscription. She thinks the magazine an excellent addition to her eight-year-old son's general education. His teacher and class recently used my binder full of Deserts in their study of Southwest Indians.

MARIAN GRONAW

Chalfant's Story Welcomed . . .

New Rochelle, New York

My Dear Friends:

You are doing a grand job of editing Desert Magazine. The April issue gave me special pleasure for it had a mighty good story on Bill Chalfant of the Inyo Register. I was born and reared in Bishop, Inyo county, and have known Mr. Chalfant since I was a child.

As I used to be director of U. S. national park service and was often in the desert country of the Southwest I know it about as well as anybody. And now, while I live most of the year in and near New York, my business, the United Potash company, is at Carlsbad, New Mexico, so I get out there two or three times a year and often go to California in connection with the trips.

The magazine has become an indispensable thing to me as an old Inyo desert rat with lots of sentiment for my boyhood range.

HORACE M. ALBRIGHT

Writes "Pome" to DM . . .

Elwood, New Jersey

Dear Desert Magazine:

These verses express how I feel about you. My son first introduced me to you, and it has been a joy to me ever since. I hope some day to see some of these desert places I read about.

I cannot roam through the desert And bask in its golden sun. I cannot see with my natural eyes The wonders that God has done; But when I am tired and weary Of the things I've always seen, I slip off alone to a quiet place And read the Desert Magazine.

I follow the trails and canyons,
I gaze at majestic spires.
Happy thoughts are my companions;
I forget about gas and tires.
But "time marches on" and my respite
Is over, short though it seems.
Then back to my work with new vigor
And heart full of happy dreams.

EDNA J. BIESELIN

Antidote to Wartime Washington . . .

Washington, D. C.

Dear Miss Harris:

It seems rather paradoxical that a subscriber should consider it a privilege to be able to subscribe to a magazine, but that's the only way to describe my feelings about Desert.

Yes, I'm going to follow the desert trails with you this year, and next—and from then on. You see, being stranded in wartime Washington is one of the greatest ordeals of my life, and having a copy of Desert each month helps to dispel the agony. Until after the war I can only dream of trips I'll take to remote canyon regions.

You have my hearty endorsement for years of continued publication of one of the most unique and fascinating magazines I've ever seen.

CHARLES F. GIESEKING

DM Goes to Camp and Home . . .

San Diego, California

Gentlemen:

As two subscriptions in the same name may seem a little odd, I feel an explanation is due you. However, Desert and its readers being what they are, you may have had this happen before. My husband recently has gone into the army. He wants Desert forwarded to camp, as he couldn't wait for far-between furloughs to see a magazine that he likes so well. He has a complete file of all the issues since November, 1937, and the second copy is for the purpose of keeping up this file while he is away. He was afraid that the issue sent to camp would become too "dogeared" for filing.

DELORIS RAUNER

Bring DM to Pacific Fleet . . .

Cincpac Staff FPO San Francisco

Dear Sir:

I understand my subscription is about to expire. That would never do, so enclosed is money order to bring 12 more issues of your most unusual publication with its desert tales and trails out here into the broad Pacific. Through this medium two of us on this station are able to keep in close contact with the land we love and to which we wish to return in the future.

Many thanks, and do make every attempt to keep up the excellent quality of the past. I'd like to see a series of stories on desert bird life similar to the series you had on cactus.

LT. (jg) R. J. RAMSTAD

Dear Lt: For desert birds, see DM Oct. '41, Apr. '42, Sept. '42, Feb. '43, Mar. '43, May '43. —L.H.



1

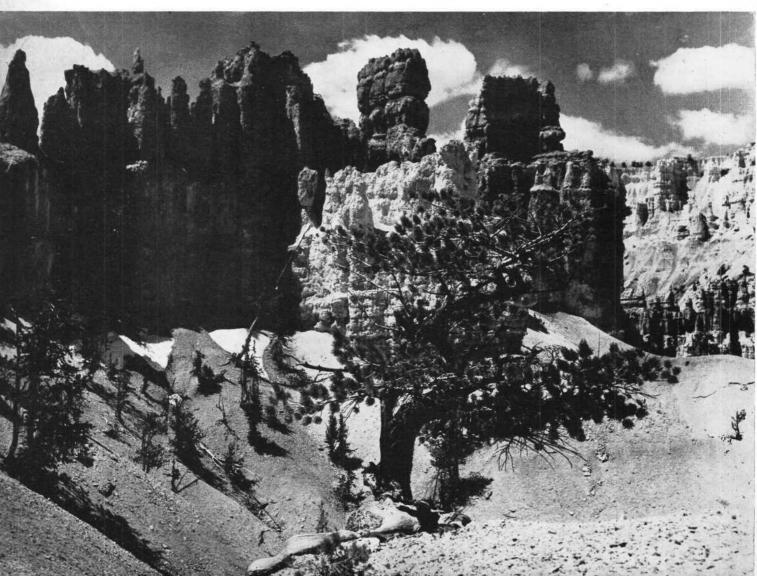
1-Tree Yuccas, New Mexico

Not trees, yet easing the eyes of that hunger for verdure pressing ever upon them across featureless plains, Tree Yuccas of New Mexico perform their mission surpassingly well. Grotesquely they gather here, garbed in fantastic headdresses, like warriors of a tribal dance.

Desert

As living expressions of the Southwest's subtle enchantment, trees rival the desert's weird and fantastic cactus clan. They too have persisted in this land where nature so meagerly assuages thirst-where life itself is often a miracle. And they have preserved artistry and grace in the unusual forms in which they manage to survive. Who can discover the fragile mystery of smoke trees and forget the desert? Who can attain after fierce tiring miles, the reviving coolness of the cottonwoods, or adventure in the moonlight of palm shadowed canyons, or embrace with longing eye the verdant promise of the sycamores—and not yearn to come back?

By JOHN L. BLACKFORD Photos by the author.



2

Trees

2-Limber Pine Bryce Canyon National Park, Utah

Memorable among the Southwest's treasures of trees are embattled Limber Pines clinging to the cream and coral slopes of Bryce Canyon, Utah. Their verdant crowns, contrasting with painted pinnacle, tower, and spire, complete a colorscape of kaleidoscopic brilliance.

3-Oaks of the Santa Ritas Southern Arizona

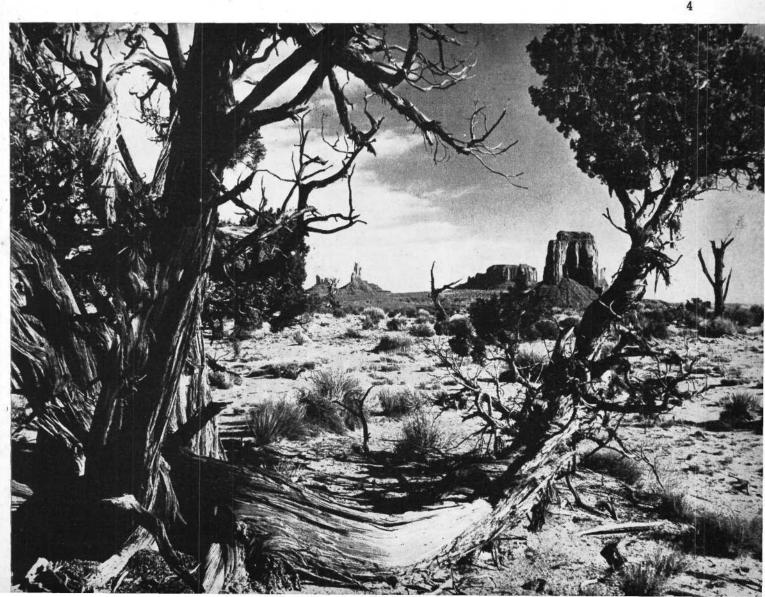
Above wind-rippled, grassy cienagas rimming wide valley-basins, dwarfish evergreen oaks mantle the slopes of the Santa Ritas. Vagrant sunbeams, snared in the intricacy of their ancient branches, spin golden webs of mellow light, glowing effulgently.

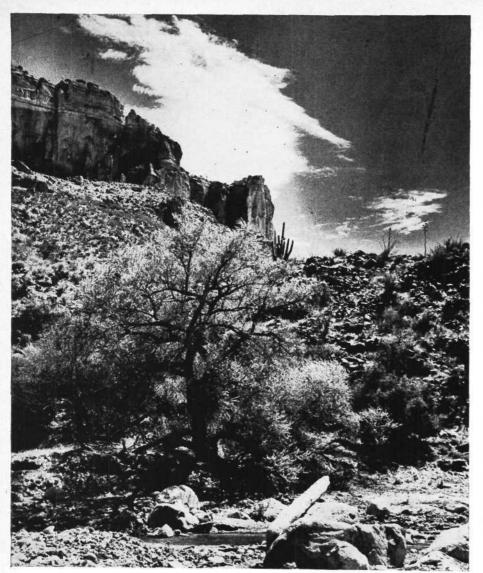


4—Desert Juniper Monument Valley, Utah-Arizona

Framing the majesty of mesas and monuments with ragged arms, this Desert Juniper enhances even the mighty splendor of Monument Valley in Utah and Arizona. Once its fibrous

mantle shod and sometimes clothed pueblo and cliff dweller. Its red-brown "berries" yielded him food. Now its grotesque trunks and intensely green crowns add infinite charm to





every photograph of fiery mesa walls and trackless red sand.

5—Fremont Cottonwoods Aravaipa Canyon, Arizona

Shade and water! One is the blessing of cottonwood, the other its promise. Men struggling from out the parched domain of saguaro and mescal have ever hailed it. Beside the flowing coolness of Aravaipa creek, Fremont Cottonwood creates a paradise.

6—Sycamores Cave Creek, Chiricahuas, Arizona

With the joy of a spent Arab gaining an oasis, you come from the desert to cave creek in the Chiricahuas. Silvery arms of Sycamores beneath unbelievably red cliffs beckon to you. Late afternoon light gleams on shining trunks leaning over crystal water.

7—Palo Verde Southern Arizona

Retaining all the grace and frailty of a stream-border tree, while discarding even its small leaves to conquer drought, the green-limbed Palo Verde is a desert miracle of beauty and endurance. With mistletoe's heavy mantillas draping its crown, this symmetrical "Verde" grows in the torrid lower Sonoran life zone of southern Arizona.

5

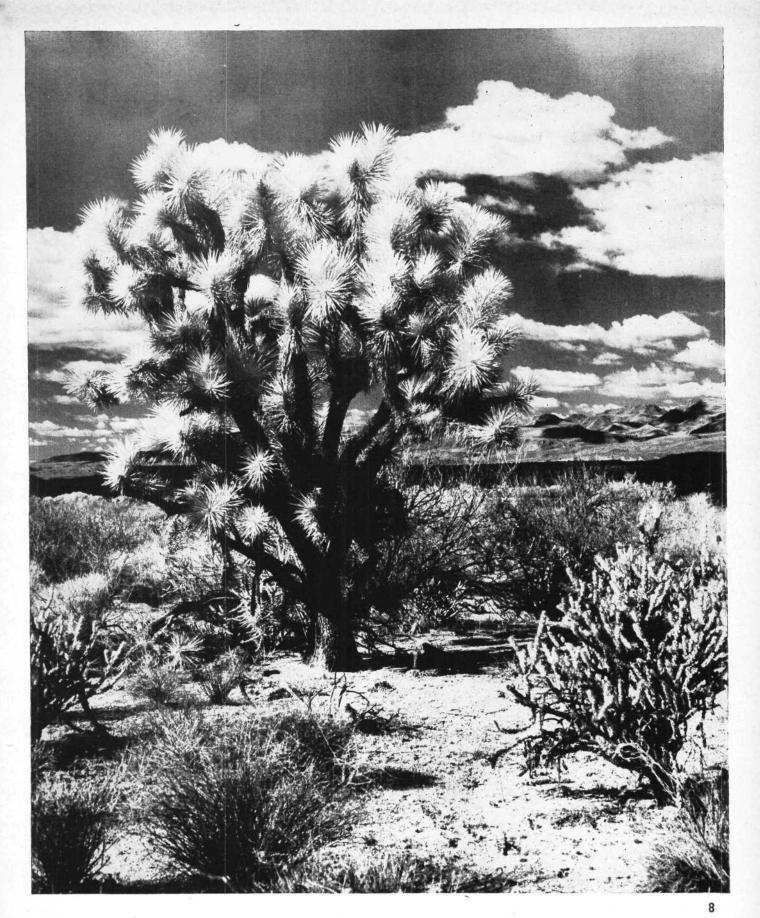




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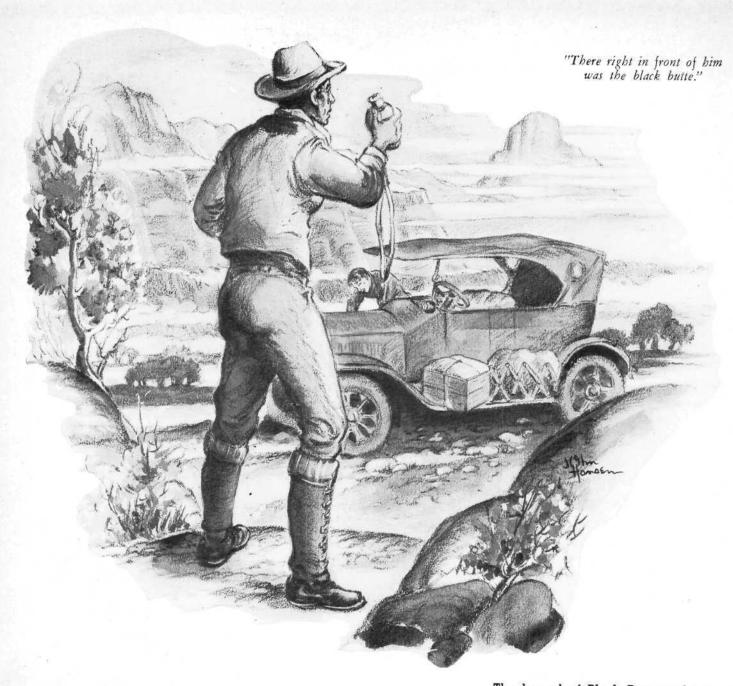
THE DESERT MAGAZINE



8-Joshua Trees West Central Arizona

Unexpectedly on forbidding bajadas and mesas is displayed the arboreal artistry of the Joshua Tree.

Above, the weird splendor of the great tree-lily breaks desert monotomy along the thirsty wash of the Big in Hills.



Black Butte Gold

By DAVID CHAMPION

Illustration by John Hansen

IFTY or more men started looking for it. About half of them never came back. One hundred took up the search. Fifty percent of them never reported for another grubstake. One man found it. As elusive as the end of the rainbow, yet so big that you can see it for miles around, is the "Black Butte" in the Little Chocolate mountains southeast of Midway Wells in Imperial county, California.

When I heard that I wanted to hear more. Just why my father used that fancy beginning I cannot say, but he did it probably to get me "inspired" for the rest of the story. This had actually happened to him.

The story started 'way back in 1906, when an Indian woman wandered off the desert into a railroad camp at about where Glamis now is. She was carrying a heavy

The legend of Black Butte and its golden treasure that looked like "black rocks" has been told many times with numerous variations. Here is the true story of one man who found the butte which mysteriously appears and disappears before the unbelieving eyes of the onlooker. He did not find the gold but he found evidence that a mineral treasure may have been taken from the legendary butte and that more may still be there.

pack and apparently was dying of thirst. Out of kindness one of the workmen showed her the water barrel. Now the water in that barrel was ice water, and when she drank some the effect was disastrous. She died within a short time, leaving behind her load, just a lot of dirty black rocks. Some of these were thrown out in a pile, but most of them were buried with her.

Then, one or two months later, a railroad surveyor one night idly scraped one of the black rocks. He noticed a yellow streak on the rock so he scraped off all the black. And then-Gold! The surveyor held a gold nugget in his hand.

A secret like that couldn't be kept still for long, and it got out when the surveyor tried to find all of the black rocks. The section men quit their jobs on the instant, and as a result the railroad was temporarily abandoned. Everyone started out over the hill in the direction the Indian woman had come, as soon as he could get a grubstake. Very few of these untrained prospectors ever were seen again. The few who did come back had been unsuccessful.

After several years talk of the black rocks died down. One day an old prospector came into Yuma, Arizona, with some of the "black gold." The town went wild. In the course of the evening the prospector drank freely and became talkative. He wouldn't tell where he found the gold, but he did say among other things that the gold was found on "a black butte that's so big that you can see it for miles around." Late that night the prospector died.

For a while prospectors combed the hills for the black butte, but were unsuccessful and again interest lagged.

Just as the first World War closed, an eastern capitalist named Hand came to Imperial Valley in search of health. He had been director of manganese during the war, and the work had broken his health. He met my father when Dad was shooting geese. Mr. Hand loved to hunt but he must have been a bad shot, for he was just fascinated by the way Dad and his two friends were bringing down the geese. Mr. Hand invited the hunters over for dinner, and in the course of the evening the talk got around to lost mines. It was then that Dad told Mr. Hand about the "black gold." Mr. Hand knew a lot about manganese, and he believed the black coating might be manganese-and if it was they would all be millionaires!

He engaged Dad and the other fellows to hunt for the butte. It probably took a lot of talking, but finally they agreed to hunt for it.

The three men camped the first night at a place that was then called Midway Wells. They started out at daybreak the next morning and about 6 o'clock a tire blew out. While changing the tire, Dad went over to the other side of the car (the side away from the sun) to get a drink of water from the canteen. As he raised the canteen to his lips he glanced idly over the desert, and then the canteen dropped! There right in front of him was the black

The canteen went unnoticed as he stared; then he called the other fellows around to look. Three pairs of jaws hung

This story of the Black Butte is one of the prize-winners in Desert Magazine's recent true experience contest. The author, David Champion of West Los Angeles, California, is 16 years of age. He writes of the experience of his father, E. T. Champion, and two companions.

open; a canteen, a tire pump and several tools dropped unnoticed to the ground. Then three "butte-hunters" went temporarily crazy! They laughed, shouted and pounded each other on the back. Then their eyes opened wider, equipment fell from nerveless fingers. The butte had disappeared!

After the excitement of this discovery passed and the tire was fixed, the three men started the old Ford out over the desert in the direction in which they had seen the butte appear.

"Well," said Dad, "that butte was right over there. So if we go in that direction we ought to see it again." After going some distance they came to a wide deep wash. They left the car there and crossed the wash on foot. As they came out of the wash they looked up and there, right in front of them, towering several hundred feet in the air, was the black butte.

The first thing they saw was the remains of a large camp. The next thing they noticed was a mine going back into the butte. The men tried to explore this mine but it had caved in badly. Inside they could pick up pieces of high-grade manganese ore as large as their heads and larger. The stuff was so pure it would take a polish like a mirror with very little rubbing.

The men climbed the butte. The lower part was pure manganese on the surface. The upper part undoubtedly was the same, but it had a "cap" of vegetation. This cap may be what causes the butte to "disappear" at certain times of the day.

Although the men found no gold, they realized this must be the butte of the "black gold." However, they thought that the miners had taken all of the gold. This as later studies proved, was not true. At any rate, the butte answered the description given by the old prospector.

As the men climbed the hill they paused to look out over the desert. To their astonishment they saw wagon tracks leading back from the camp toward the Colorado river. At this point the river was the boundary between the United States and Mexico. During the war the United States had been getting manganese from somewhere in Mexico, and Dad thought that this might be where the Mexican manganese came from-that the Mexicans operated this mine and sold the manganese back to the U. S. as a Mexican product.

After gathering some specimens and noting the butte's position, the three drove back to town. Mr. Hand pronounced it the finest manganese he ever had seen, and then asked them to get some more geese for a celebration dinner, at which time he would draw up a contract which would "make them all millionaires." He insisted that he go along with the hunters. Except for this fact, I might be the son of a millionaire! The wet and cold proved too much for Mr. Hand's poor condition. By the next morning he had contracted double pneumonia and in less than two weeks he died.

This left Dad and his friends out of a job. They learned they were three out of the nine or 10 persons who ever had seen the butte. They have never, any of them, gone back to the butte.

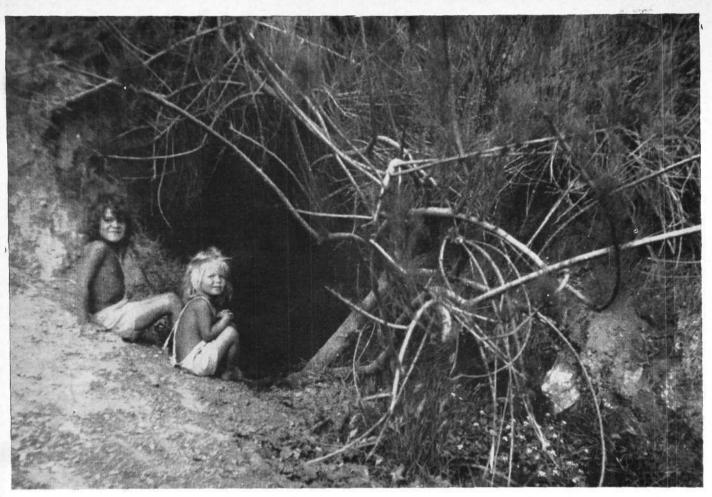
To my knowledge no one besides the Indian woman and the old prospector ever found the gold. It is there yet and undoubtedly will be there for some time to come. However, the government has been informed of the butte and at this writing is probably putting out a search for it.

People are still searching for this butte but apparently it can be seen only at certain times of the day. One of these times is early in the morning. My father thinks that he could go back to that butte. Sometime we may. But for the present Black Butte is just a romantic story, the black gold a myth.

ANSWERS TO TRUE OR FALSE

Questions on page 12.

- 1-False. Their poison is less potent than that of an ordinary honey bee.
- -False. They are fine quality quartz crystals, not diamonds.
- 3-True. In upper Palm Canyon one of the falls is 60 feet high, with a secondary 15-foot fall above it.
- True. 5-False. Some species bloom only in the day.
- -True.
- -False. There was no Salton sea in 1846.
- -True. 9-True. -False. "Town too tough to die" is Tombstone, Arizona.
- 11-False. Named for Organ Pipe cactus growing there. 12—True. 13—True. 14—False. It is about archaeology.
- 15-False. Pimas kept record of time and events on hand carved calendar sticks.
- 16-True. Also occurs in green, yellow. rose, as well as shades of violet. 17—True. Used by traders and trappers
- in early 19th century. Butterfield line established 1857-8.
- 18-True.
- -False. Author was Mary Roberts 19-Rinehart.
- False. Name is abbreviation of King of Arizona, from mine near southern base.



Rudyard and Victoria at the mouth of the little cave that was the source of the spring.

Desert Refuge

By MARSHAL SOUTH

ATTERNED on the lonely wind-sifted sand dunes of the desert the "little people" leave the record of their wanderings. Mice, lizards, beetles; leisurely, slow-pacing tarantulas, furtive, suspicious centipedes and black-coated, meditative pinacates—upon the soft surface of the sand their varied tiny tracks cross and criss-cross in a maze of trails that tell tangled stories of exploration and of search.

When we think back upon the windings of our own desert trail, since the day when we set out from Yaquitepec, we are reminded again of the bond of kinship which binds all dwellers of the earth into one brotherhood. For if we were to take a pen and some red ink and trace back all the windings and turnings of our course, from its beginning until now, the resultant pattern would be a fair duplicate of the involved amblings of some meditative old pinacate beetle wandering over the dunes in search of food and a better dwelling place. Back and forth, in and out. Crossing and recrossing. Here a long pause. There a hasty scurry past some uninviting section. Here a bit of luck; there some delaying mishap. Between our own search and the search of the serious old beetle there is little difference. The record of the one is written in tiny tracks upon the sand. The record of the other in wheel tracks which, in the vast spread of the universe, are just as tiny.

Permission from Uncle Sam for new tires was not enough. Marshal South took his "magic paper" from one dealer to another—but apparently 450-21 size was extinct. And there sat the South family in the middle of the Utah desert, with another, more formidable barrier to their search for a home. Then suddenly into the circle of their lamenting came a messenger with the news that such tires were to be found in Kingman, Arizona. Now they are anxiously awaiting arrival of the tires, half-expecting such good fortune to be as illusive as the one perfect home site they have been seeking since last September.

We have been stalled for many days. And the reason and the trouble can be told in one word—tires. There is a limit to the endurance of tires, even when you coddle them and baby them and swaddle them in artificial wrappings and lavish upon them a hundred times more tenderness than Uncle Sam ever amagined, even in his most inspired moments.

The limit of our tires was reached and passed long ago. But we shut our eyes and minds to it. And for a long time it seemed the tires ran on will-power alone. But even that would not last forever. There came a day when our long suffering chariot sighed softly, looked at us reproachfully from out of her two desert bleared headlight eyes and sank wearily down under the shadow of the red sandstone cliffs of Utah. Evening came up across the desert on silent feet and the bats began to flitter forth from their caves. It was time indeed to "re-tire."

"Be of good cheer," said Uncle Sam's efficient but sympathetic representatives when they had delved fully into the mat-

ter. "Behold, here is a magic paper. With it you may go out into the marts of trade. And by virtue of the words that are written thereon the kings and princes of commerce will unbar the gates; the merchants will unlock the innermost strong boxes. They will draw forth two tires and will sell them to thee to replace those two which are now as ragged fragments. Behold, I, Uncle Sam, have so decreed. So fear not."

So we took the magic paper in great joy. And we fared forth into the marts of the silversmiths and the goldsmiths and the diamond buyers and the sellers of tires.

And the first merchant to whom we presented the magic paper said, "Ah yes. Be seated just a moment while I descend to the strong room and speak with the guards and unfasten the locks. I will bring you your two tires." And he went away smiling with the happiness of one who has made a sale.

And he was gone a long time. And returned without smiles. "Alas," he said, and his voice was choked, "I have not the size! I have not the size. It is an old size—and rare."

And he wept and wrung his hands together and handed us back the magic paper. And in sorrow he watched us depart. For his heart was heavy.

So we hastoned away to other merchants. And to others. And still unto others. And with all the story was the same. Cunning jewels, yes. Peacocks and rubies and spices; all the silks and perfumes of the Indies—even a thrice sacred five pound sack of sugar could we have. But tires, in the 450-21 size? Alas and alas! These things were a dream. Even the old men did not remember ever having seen one.

So we became alarmed. And we sent swift messengers by the talking wires to the East. To the West. To the farthest corners of the land. And the replies came back with sobs and tears. All of the 450-21s were extinct. None had been seen in the land for more than a thousand years. So we sat by the mesquite bushes, under the red cliffs of Utah and mourned.

Then, into our grief, as we sat in the cold ashes of the campfire, there came a mysterious messenger bearing a scroll written by a great magician whose castle we once had visited in the ancient city of Kings, which is called also Kingman, and is in the State of Arizona.

And when we had read the scroll we leaped to our feet and shouted. And we exclaimed for joy. And we clapped our hands and summoned 20 swift runners and 10 riders of fast camels. And we loaded them with silks and spices and jewels and camphor wood and oil and incense and all manner of wealth, yea even to five times a king's ransom. And we commanded and said, "Speed quickly. Haste thou. Pause not until you have reached the castle of W. J. Tarr, which is south of the railroad tracks of Kingman, Arizona. Deliver to him all this wealth. But return not without the two slightly used 450-21 tires of which he speaks in this scroll. Rush now! Hurry. Beat it—lest, unhappily he selleth the tires before thou gettest there. Scoot!" And the messengers departed running.

So that, dear desert friends, is that. And as far as matters have gone at present. Will we get our tires? Quien sabe? . . . for we have heard no word yet from our messengers. But we think we have a good chance. There are very few things that our Kingman friend cannot supply for cars of every known vintage. The accumulation of long years of wrecking and classifying and storing. His is in truth a magic castle. So if he hasn't sold the tires in the meantime . . .

Next month you shall know.

But there is a silver lining to every dark cloud. And often the lining is more important than the cloud itself. The seeming disasters of life are in many cases really its stepping stones to better things. The majority of people, who can look back calmly over a course of years, will be ready to admit that this is true. Therefore, convinced as we are that no circumstance of existence is due to "blind chance" we are not worried overmuch by our enforced waiting. For one thing it is no more than a fresh demonstration of the truth that the farther human beings get from nature and the ability to support themselves by their own efforts the more helpless they are against misfortune.

The special glory of, the desert land of southern Utah is its coloring. The whole landscape swims in a sea of color that is so vivid it often is unbelievable. Vermilion and purple and rose and lavender, jutting minarets of ruby red against a far, tumbled background of ridges that are shadowy violet and pink and grey and fleecy lacings of white. Sometimes the scintillating color vibrations are so intense that you begin to doubt your eyes. Your ears seem to ring with the quivering waves of rainbow hue that sweep back and forth between the fantastic, glowing cliffs.

What a priceless world of enchantment is this varied Desert Empire which we Americans are privileged to enjoy. Too few of us are aware of it or really appreciate it. Like children our eyes and ears are susceptible to the tawdry blandishments of far foreign places. It has not dawned upon us that the richest offerings of the world are within our own borders.

But what I really started out to explain was that the "silver lining" to the dark cloud of our enforced halt has been really worth while. Our camp spot is pleasant, with high, rustling cottonwood trees that cast welcome shade along the edge of a tule-grown hollow. Among the dark green of the crowding rushes, innumerable white flowers of the deer-tongue gleam in the sunlight like a scatter of newly fallen snowflakes. Bees drone around the blossoms of the mesquites. Stray humming-birds, intent upon their business, whizz past like feathered bullets.

Sardonic ravens live hereabouts. "Wauk! Wauk!" they cry, as they flop heavily overhead eyeing our stranded car. "Walk yourself!" Rider and Rudyard shout back angrily. Little Victoria dances in the warm dust and shakes her tiny fist furiously at the sable jokesters. "You walk youselfs!" she shrills. But the ravens only chuckle throatily and flop on towards the vermilion cliffs.

There is a pool of water here too. A pool big enough for the boys to go voyaging upon a crazy raft. Sometimes they take Victoria and her doll Georgine for passengers and go poling along the reedy shoreline of their tiny lake, a joyous bunch of bare skinned, sun-browned little savages whose happy laughter swerves the dipping swallows and startles the dozing bullfrogs from their hideouts amid the water grass. The towering red sandstone cliffs glow warmly in the sun and the still surface of the pool mirrors their reflections and the drift of the lazy white clouds across the blue Utah sky. I don't think that Rider, Rudyard or Victoria are very worried about the tire situation. I have a sneaking suspicion that it wouldn't bother them much if the tires never appeared.

An old land of ancient memories—sometimes drowsy in the sun, sometimes yelling with a fury of wind and storm. You climb back into the canyons and you find here and there little walls of rock built to block crevices between boulders—little bulwarks that were man's effort to keep the driving wind from his rude camp spots. On the mesas there are mounds where you

may dig up age-blackened pots and a few crumbling bones. Around the old water holes are chips of obsidian and broken arrow points.

How long has man wandered and lived and made his dwelling amongst the red cliffs of this desert land? Perhaps the wind could tell—the old desert wind that goes about sweeping industriously with its ancient broom of the fled and fleeting seasons. Blotting tracks, blotting graves, blotting peoples and civilizations. The wind talks to itself. But mostly at night and amongst the cliffs and caves.

There are springs up under the cliffs and along the gullies and canyons too. Springs that many men have known in the past and which perhaps will continue to quench the thirst of many a weary desert wanderer long after our present day pomp and civilization have followed that of our predecessors beneath the blanket of dust. Not yet have Rider, Rudyard and Victoria forgotten the days at Yaquitepec when water was an infinitely precious, hoarded thing. The sight of a spring, be it big or little, is still to them a thrill. Something to be exclaimed over—the miracle of real water welling up from the earth.

We came upon such a spring a few days back, when we were actually following the advice of the ravens to "wauk, wauk." We had walked. We had tramped out across the sunlit desert and circled back through the mesquites and creosotes into a long, sandy wash that drew down from the red sandstone ramparts to the north. Tamarisk trees grew thickly in the wash bottom together with a scattering of willows. The banks were a tangle of thick rabbit brush, varied with an occasional mesquite or a big bunchy cholla.

The day was hot. Beyond the sultry vegetation of the creek bed the red cliffs rose as a thirsty glowing backdrop on a stagesetting of shimmering dryness. The banks of the gully drew together as we pushed onward, their steep sides crowned with a savage capping of black lava rock in which, here and there, were eerie caves. And then suddenly, there was water under our feet—real, sparkling, cold water that came welling up out of the sand to chill, gratefully, our earth-scorched bare toes. "Spring!" Rudyard shouted, "Another spring! Look, daddy!"

We all looked across the glinting stretch of sand, following his pointing finger. There, spilling down the opposite bank in a little cascade, came the thin stream of water which was soaking the sand on which we stood. But it did not originate there. For, when we had climbed the bank and traced the tiny rivulet back through the thick brush, we came at last to a shallow cave, brush screened, under a steep bluff. Within, patterned by sunlight and shadow was a shallow pool into which, with tinkling music, a thousand drips and trickles from the wet rocks fell splashing.

Outside the sun blazed. Inside, within that cool grotto, was cathedral dimness and the liquid music of fairy harps. The contrast was startling. Perhaps only in the desert can one see—and really appreciate—such contrasts. Small wonder that the old writers of the scriptures—themselves dwellers in a dry and thirsty land—alluded so often and so feelingly to the shadows of great rocks and to the music made by running water.

ONWARD

Go on! Regardless of success
Or failure. Let the powers who bless
Your effort or condemn its faults
Praise on—or make their harsh assaults.
Let naught dissuade you. Who are they
Who dare your upward course delay?
All, all are lesser to your cause.
Go on! The universal laws
Will fire your dreams and hopes to be
And help you build your destiny.

-Tanya South.

Sez Hard Rock Shorty of Death Valley ... By LON GARRISON

"I'd just like to give yuh a little advice," stated Hard Rock Shorty. "Don't never go no place with Baldy Williams out in public an' figger you're gonna enjoy it. Baldy's a close man with his nickels an' it's real embarassin' sometimes if folks know you're with 'im."

Hard Rock shuddered as he thought of the times Baldy had mixed him up in his chiseling.

"It's bad enough to get charged for a meal down to his place an' pay for your drinkin' water but the worst time of all was oncet a dude we'd helped out asked us down to Los Angeles an' put us up in one o' them fancy beach hotels with all expenses paid.

"After we'd been there a few days, Baldy got kind o' sick. I figgered it was too much attention to the free meals, but anyway he went to see a doctor. The Doc thumped 'im over an' then says what Baldy needs is exercise—somethin' like horseback ridin'.

"Well, that ain't what I'd o' recommended but I knowed Baldy well enough to know that the only way he'd get any exercise'd be if he figgered the horse was gettin' most

of it. But that night, around midnight as I was takin' a little walk around outside the hotel, I met Baldy—an' Baldy was on horseback ridin' around the hotel grounds as natural as the Pony Express.

"The horse waded through three or four flower beds an' stopped for a drink out of a goldfish pond. Baldy was settin' up there as proud o' hisself as a monkey with a tin cup.

"'Hey!' I hollers at him. 'Why're yuh out ridin' this time o' night?'

"Baldy looks around kind o' surprised.

"'Oh, it's you,' he says. 'Why, I asked the feller back at the stable an' he wanted two dollars a hour for a horse this afternoon.'

"'How much does he want at night?' I asked.

"'Oh,' says Baldy, 'he ain't there at night.'"

HELL. on the Desert

ARIZONA

Wild Horses Expelled . . .

PHOENIX-Wild horses and burros must be cleared from Arizona grazing ranges by September 1, reports regional director L. R. Brooks. Because of drought conditions all available feed is needed by livestock contributing directly to war needs and stockmen owning wild animals are asked to remove them from ranges.

Guayule Yields Largest .

PHOENIX-Arizona guayule plantings yield more rubber per acre than California, Texas and New Mexico, reports W. W. Twoomey, acting district supervisor. High percentage of rubber-175 pounds per acre-plus large vigorous plants give Arizona plots their superiority he said.

Arizona Gets Coolers . . .

PHOENIX-War workers and invalids may rejoice in ruling made by WPB that 16,000 coolers will be made available to them. Henry S. Wright, district manager, states that coolers will be built by 16 Tucson and Phoenix manufacturers, of non-strategic materials.

First WAAC Photographer . . .

WILLIAMS FIELD - First woman photographer to be assigned to Arizona army air field is Corp. Doris Day of the WAAC, on duty here. Well qualified for the post after years of journalism and photography experience, she is also official photographer of new Williams Field News.

War Prisoners at Work . . . PHOENIX — Italian war prisoners have begun maintaining irrigation ditches in central Arizona, Col. William A. Holden states. Prisoners also were used in harvesting 1,000 acres of potatoes in camps near Tolleson, Mesa, Eloy, Yuma and Parker.

Native Son Dies .

KINGMAN - William Thompson Henderson, reputed first native-born white man in Arizona, passed away at age of 84, in Flagstaff, June 17. He had been a printer, editing and publishing newspapers throughout Arizona and New Mexico. He was an early builder of Kingman.

Former Governor Passes

FLAGSTAFF-John C. Phillips, governor of Arizona from 1929 to 1931, died last month from heart attack at the age of 72. A resident of Arizona for 45 years, he was nicknamed "Honest John" because of the simplicity of his life and his reputation for integrity.

John C. Page Resigns . . .

YUMA-Praising him for his "outstanding record" of over six years, President Roosevelt accepted resignation of John C. Page as commissioner of reclamation bureau. Because of illness, Mr. Page was advised by physicians to give up his post but was persuaded by Harold L. Ickes to continue in government service as consulting engineer of western land and water utilization.

Fellowships for Students . . .

TUCSON — To encourage students from Spanish-speaking families of Southwest to carry on graduate work and prepare themselves for work among their own people, fellowship awards will be made to students who have graduated from universities and colleges in Texas, Colorado. New Mexico and Southern California. General requirements are citizenship, age under 35 years, good character and health, presentation of a plan of study related to proposed work among people of the Southwest, and sufficient undergraduate preparation. Qualified graduates may apply directly to Institute of International Education, 2 W. 45th St., New York 19,

Charles J. (White Mountain) Smith, former superintendent Grand Teton national park was transferred June 1 to Zion and Bryce Canyon national parks.

. . .

A site high up on the Navajo reservation between Window Rock and Fort Defiance has been chosen by a special Indian committee as a memorial cemetery for all Navajo who die in the present war.

. . . CALIFORNIA

Reports on Earthquakes . . .

BISHOP - Seeking cooperation of Inyo-Mono residents in tracing earthquakes the government has issued postpaid cards addressed to Seismological Field Survey for anyone wishing to report earthquakes. Franklin P. Ulrich of U. S. coast and geodetic survey was in Bishop last month following a temblor on Memorial day.

New Seed Crops Grown . . .

HEMET-Because of climatic and soil conditions, seed production is becoming a chief money crop in Hemet valley, estimates J. C. Loomis, pioneer seedsman. More than three-quarters of a million dollars will return to farmers this year from alfalfa, carrot, sugar beet, onion and turnip seed crops.

Naval Air Station Commissioned . . .

HOLTVILLE-New \$3,000,000 naval air training station northeast of here was commissioned July 4 by Rear Adm. Ernest L. Gunther, USN, commandant of San Diego naval air training center. Lt. Comdr. E. B. Bronte is in command of the

Border Road to Mexican Interior . . .

CALEXICO-Rail connection between Mexicali valley (just across the international border from here) and the interior of Mexico may become a reality if project now underway in Sonora is completed according to present plan. Project calls for extension of Mexicali-to-Punta Peñasco rail line from head of Gulf of California on through Sonora to connect with Southern Pacific main line below Santa Ana, Sonora, Mexico. According to Eng. Rafael Tena Ramirez, in charge of Mexicali office for Mexican government, railroad grade already is being built. Work is in progress from both ends, from Punta Peñasco on the west and from Benjamin Hill on the east.

Army Hospital Being Built . . .

BANNING-Construction began last month on the army's 1,000-bed general hospital here and will be completed within three months, stated Colonel J. B. Cress, commanding officer of engineer troops. Banning was selected because cool summer climate, good water and scenic beauty are conducive to health and comfort. Also all utilities are available including highway, rail and air transportation. A crew of 700 engineers will accomplish construction, and up to 1,000 persons will be required to maintain the hospital thereafter. Structures will be similar to the army hospital just completed at Spadra, near Pomona. Work will serve as technical training for army engineers.

Excellent Melon Harvest . . .

BLYTHE-Twenty cars daily leave packing sheds in Palo Verde valley in biggest melon harvest yet. Growers and packers are enthusiastic at prospect of excellent seasons in honeydews, cantaloupes and watermelons.

Housing Project Under Way . . .

BLYTHE - Federal funds totaling \$300,000 will be used for construction of residential units, dormitories and family dwellings, for civilian workers at Blythe air base. Plans for construction of 16 rental units for employes of Santa Fe railroad also have been approved for this district.

High explosives in an amount of \$39,-000 will be stored at the marine corps training area, Camp Dunlap, Niland; the project is approved by the Secretary of the Navy Frank Knox.

NEVADA

Post-War Highway Projected . . .

CARSON CITY—Plans for three-year post-war reconstruction and building of highways in Nevada have been outlined by state highway engineer, Robert A. Allen in what is known as the Nevada plan. It is designed to ease readjustment for soldiers and defense plant workers who will be forced to find other employment at close of the war, and will also provide extensive highways and roads throughout the state. Estimated cost is about \$38,049,370 to be paid in part from funds to be set aside by congress; this will employ approximately 28,500 men during the three-year period.

Not for Soup . . .

CARSON CITY—Two legs, two vertebra and several smaller bones of a Pleistocene-age giant mammoth have been unearthed in a dry wash near Panaca. If the entire skeleton is found it will be restored and placed in building erected near spot where it was originally discovered, says Robert A. Allen, head of state highway department.

Turtle Treat . . .

LAS VEGAS—Meat rationing has brought the lowly turtle to attention of fishermen. Its meat is considered to have a delectable flavor equal to chicken. Since the turtle is classed as a reptile, no laws control the manner of taking, bag limits, etc.

Humboldt Runoff Abnormal . . .

LOVELOCK—Although there are difficulties in making accurate forecasts, runoff on Humboldt river, measured at Palisade gauging station, may reach unusual volume of 200 percent above normal this year, according to conclusions reached by cooperative snow survey.

Possible Navy Center . . .

FALLON—Plans are being worked out for the building of navy bomber base in Churchill county. Although there is little danger, navy officials are willing to make concessions to livestock men for damage to animals by machine-gun or low bombing practice, Committees are hard at work interviewing farmers and figuring indemnities because the navy base there would be beneficial to Fallon.

The Desert Trading Post

Classified advertising in this section costs five cents a word, \$1.00 minimum per issue— Actually about 1½ cents per thousand readers.

MISCELLANEOUS

FOR SALE-12 beautiful perfect prehistoric Indian arrowheads, \$1; 10 tiny perfect translu-cent chalcedony bird arrowheads, \$1; 10 perfect arrowheads from 10 different states, \$1; perfect stone tomahawk, \$1; 4 perfect spearheads, \$1; 5 stone net sinkers, \$1; 10 perfect stemmed fish scalers, \$1; 7 stone line sinkers, \$1; 4 perfect agate bird arrows, \$1; 5 perfect flint drills, \$1; 7 perfect flint awls, \$1; 10 beautiful round head stunning arrowheads, \$1; 4 fine perfect saw edged arrowheads, \$1; 4 fine perfect flying bird arrowheads, \$1; 4 fine perfect drill-pointed arrowheads, \$1; 4 fine perfect queer shaped arrowheads, \$1; 4 rare perfect double notched above a barbed stem base arrowheads, \$1; 5 perfect double notched above a stemmed base arrowheads, \$1; 12 small perfect knife blades of flint, \$1; rare shaped ceremonial flint, \$1; 3 flint chisels, \$1; 7 quartz crystals from graves, \$1; 10 arrowheads of ten different materials including petrified wood, \$1. All of the above 23 offers for \$20. Locations given on all. 100 good grade assorted arrowheads, \$3.00 prepaid. 100 all perfect translucent chalcedony arrowheads in pinkish, red, creamy white, etc., at \$10.00. 100 very fine mixed arrowheads all perfect showy colors and including many rare shapes and types such as drill pointed, double notched, saw edged, queer shapes, etc., location and name of types given, \$25.00 prepaid. List of thousands of other items free. Caddo Trading Post, Glenwood, Arkansas.

WANT .22 calibre short or long ammunition. Will pay \$120.00 per case (10,000 shells). Distance no barrier. Cash Waiting. Peerless Vending Machine Company, 220 West 42nd Street, New York City. Shoes Rationed — Protect your shoes with Leather Flexolene, adds thousands of extra steps to the life of your shoe soles. Prolongs life of shoes for children, women and men. Keeps feet dry in rainy weather. Send one dollar and we will ship enough for 20 pairs of shoes post paid. We guarantee results. Rudolf Fritsche, 37-15 72nd St., Jackson Heights, L. I., N. Y.

HOBBIES, a collector's magazine. A 10 year run from 1933 February to 1943 February, for \$35.00, postfree. N. A. Kovach, 712 So. Hoover St., Los Angeles, California.

Wanted: Business property on main highway. Gas, Curio, Cabin type preferred. No taverns. Give all details. Net income, selling price and terms. Dr. Frank Satten, 6241/2 Davis St., Evanston, Illinois.

LIVESTOCK

KARAKULS producers of Persian Lamb fur are easy to raise and adapted to the desert which is their native home. For further information write Addis Kelley, 4637 E. 52 Place, Maywood, California.

Karakul Sheep from our Breeding Ranch are especially bred to thrive on the natural feed of the Desert. For information write James Yoakam, Leading Breeder, 1128 No. Hill Ave., Pasadena, California.

REAL ESTATE

For Imperial Valley Farms —

W. E. HANCOCK

"The Farm Land Man"

Since 1914

EL CENTRO — — — CALIFORNIA

Relief for Red Stamps . . .

LAS VEGAS—Western ranchers may have elk and venison on the dinner table to replace rationed meat if a bill introduced by Senator P. A. McCarran passes both houses of congress. The bill proposes to provide meat for families and to protect the wild animals from dying because of starvation, freezing, malnutrition and disease, game officials state.

Irrigation Project Proposed . . .

PIOCHE—\$300,000 is required for proposed Moapa valley irrigation project to furnish water to 3,800 acres of land, approximately one-fifth within Moapa Indian reservation. If appropriation bill is passed, it will provide flood control protection and settle water rights controversy between Indian and white users, reports Senator McCarran. Construction would take less than a year and the project would be self-liquidating.

NEW MEXICO

Green House Successful . . .

ALBUQUERQUE—Problem of supplying five Indian hospitals and two boarding schools with fresh vegetables during war emergency caused Dr. S. D. Aberle, superintendent, to experiment with chemical green houses. Today, the 25x50 foot area produces more than 11/2 acres of soil, the vegetables growing faster and yielding larger harvests per plant. Green house operates year round with minimum of care. Transplanting of seedlings has proven highly successful. In disclosing preliminary success of the experiment Dr. Aberle paid tribute to Dr. W. A. Gekler, among the first to give valuable assistance in promoting the green house.

Small World . . .

SANTA FE—New type tourists may be seen in New Mexico when the war is over. A letter signed "Din Bandhu" from Fiji Islands was received at state tourist bureau asking for literature about the state. Request will be granted immediately, Joseph A. Bursey, bureau director reports.

New Mexico Ranch Sold . . .

SANTA FE — Waite Phillips, wealthy Oklahoma oilman, sold the last of his northern New Mexico ranch holdings to McDaniel and Sons, and Heck Brothers for a vast sum, the new owners announced recently. Heck Brothers bought the Maxwell ranch home, about 11,000 acres, and the remainder of grade livestock; McDaniel firm acquired 119,000 acres and some livestock. 130,000 acres with headquarters, cattle, horses and sheep were given some time ago to the Boy Scouts of America, and the rest of the ranch had been for sale almost a year.

Valle Grande, world's largest extinct volcanic crater, is in Jemez mountains 40 miles northwest of Santa Fe. Crater is about 50 miles in circumference and at one point is 18 miles in diameter. Crater bed is now grazing land for livestock.

Annual Sheriff's Posse Rodeo will be held at Tucumcari on August 13, 14 and 15.

The warm water fishing season in Elephant Butte lake opened June 1 and will remain open until November 30.

UTAH

New Variety of Bean . .

LOGAN — New Logan bean will make its agricultural debut next spring, research men at State college have announced. The progeny has been developed after six years' work at U. S. breeding laboratory at Charleston, South Carolina, and seed supplies adequate for general planting are now in the hands of dealers. Selections for type had been made in college experimental plots in Logan.

Robbers' Roost Round-Up . . .

PRICE—Forty-two bulls, calves, and steers will be shipped to Price for annual Robbers' Roost Round-Up, sponsored by American Legion officials. Because of uncertain conditions, the affair was not held last year, but increased population and travel restrictions insure its success in 1943.

Weather

FROM PHOENIX BUREAU

| Temperatures- | Degrees |
|----------------------------|---------|
| Mean for June | 84.4 |
| Normal for June | |
| High on June 18 | 108.0 |
| Low on June 6 | |
| Rainfall— | Inches |
| Total for June | 0.01 |
| Normal for June | 0.07 |
| Weather— | |
| Days clear | 19 |
| Days partly cloudy | 7 |
| Days cloudy | 4 |
| Percentage sunshine | 87 |
| Percentage sunshine normal | 94 |

FROM YUMA BUREAU

| FROM YUMA BUREAU | |
|---|-----------|
| Temperatures— | Degrees |
| Mean for June | |
| Normal for June | 84.7 |
| High on June 17 | 112.0 |
| Low on June 14 | 55.0 |
| Rainfall— | Inches |
| Total for June | Trace |
| 74 year average for June | 0.02 |
| Weather- | |
| Days clear | 27 |
| Days partly cloudy | 3 |
| Days cloudy | |
| Percentage sunshine | 94 |
| Release from Lake Mead, averag 18,000 sec. ft. Storage during r creased materially but runoff fro shed much below average. | month in- |

Noted Mormon Passes . . .

SALT LAKE CITY—Rudger Clawson, noted Mormon and president of the Council of the Twelve Apostles of the Latter Day Saints church, died June 21 following a brief illness. At 22 he had been a missionary in Georgia, and later was put in charge of the church's European mission from 1910 to 1913. He became president of the governing body of the church in 1918 and served for many years.

Excellent Exhibits Expected . . .

OGDEN—Largest and best exhibits ever presented are expected for Ogden livestock show, to be held November 7-10, declared E. J. Fjeldsted, manager. Increased production was stimulated by boost in premiums offered by breeding associations and the show.

Lamb Shipments Delayed . . .

OGDEN—Because of late rainfall, lamb shipments from Idaho were delayed until July in order that animals might gain as much weight as possible before going to market. Top lambs are bringing \$1.50 higher than last year according to reports by R. C. Albright, manager of Ogden Union Stockyards company.

Land Settlement Made . . .

DUCHESNE—Settlement of an eightyear-old controversy over Ute Indian land and public domain in central Utah is being accomplished by the Robinson bill which restores 60,000 acres of land to Uintah and Ouray reservations. Amendments will return some 160,000 acres of reservation land to U. S. and establish grazing reserves in district eight as part of the Indian reservation. Pending passage of legislation, parties will continue operating under the present approved agreement.

Fruit Crop Records . . .

OGDEN—Bumper crops in peaches, pears and cherries are expected this year by Utah orchardists, according to forecast of Edward C. Paxton, agricultural statistician. Hailstorms caused only negligible damage on apricot and cherry crops.

Amalgamated Sugar company and farm organization leaders are considering increased production of sugar beet seed in Avon and Paradise, areas which in 1942 produced more than 29,000 pounds of seed, 2,450 pounds to the acre, bringing an average gross income of \$272 per acre.

Starting with a porcupine, soldiers at Wendover field expect to have not merely the only zoo on an army air base but also the finest. They captured their first specimen after a chase and struggle during inspection of the machine gun range.

Victory Fair . . .

SALT LAKE CITY—Production for Victory will keynote 1943 Utah state fair, announced Sheldon R. Brewster, secretary-manager. Outstanding feature will be comprehensive review of industrial and agricultural wartime activities. Also entertainment and educational features will exceed previous years' excellent standard according to Mr. Brewster. Dates are September 4 to 9 inclusive.

A WESTERN THRILL

"Courage," a remarkable oil painting 20x60 feet, the Covered Wagon Train crossing the desert in '68. Over a year in painting. On display (free) at Knott's Berry Place where the Boysenberry was introduced to the world and famous for fried chicken dinners with luscious Boysenberry pie.

You'll want (1) A 4-color picture of this huge painting suitable for framing. (2) A 36-page handsomely illustrated souvenir, pictures and original drawings, of Ghost Town Village and story of this roadside stand which grew to a \$600,000 annual business. (3) Two years subscription (12 numbers) to our illustrated bi-monthly magazine of the West. True tales of the days of gold, achievements of westerners today and courageous thoughts for days to come. Mention this paper and enclose one dollar for all three and get authentic western facts. Postpaid. GHOST TOWN NEWS, BUENA PARK, CALIF.

100% VIRGIN WOOL HAND-WOVEN TWEEDS

A limited yardage of these beautiful fabrics is still available from our stocks. Hand-woven with painstaking care by our skilled Spanish-American weavers from original designs by Preston McCrossen; distinctive, long-wearing, easy-draping; in weights and patterns for suitings and topcoatings for men and women.

SPECIAL: 16 oz. 56 inch width herringbone weave suiting in mixtures of natural gray with light blue, bright green, natural white or gray. \$7.50 per yard. In writing for swatches please specify color preferred.



Desert's Clown Faced Flower

By MARY BEAL

OME of the most intriguing annuals that enliven the desert were classed as buffoons by early botanists. The genus name Mimulus (diminutive of the Latin *mimus* meaning mimic or comic actor) was inspired by the grinning appearance of the corolla, fancied to resemble the gaping mask worn by mimes of the ancient stage. For everyday use, Monkey Flower is the accepted name.

Of the 50 species identified most are western. Several are found on the desert and three species are confined almost entirely to desert areas. Quite captivating are these little posies, as gay as the merry-makers they supposedly imitate. To be sure they make no great splashes of glowing color, these small fry, but it is delightful to come upon little bevies of them embroidering with roseate hues rocky and gravelly slopes and washes.

The species most commonly encountered is that usually called Desert Monkey Flower or Pink Monkey Flower, although its botanically inclined friends may speak of it as the Bigelow mimulus.

Mimulus bigelovii

A sticky hairy plant averaging 1½ to 6 inches high. Usually a single reddish stem branches well above the base, although flourishing plants may have two or more stems from the base. The thin leaves vary from ovate to lanceolate and often are tinged with red. The corolla is crimson, an inch or less across, its 5 lobes spreading widely, the throat with a yellow patch and purple spots. The calyx, unequally cleft into sharply-pointed teeth, enlarges noticeably in fruit.

It is surprising what a showy yield of blossoms these small plants produce They well could grace cultivated gardens. Even the tiniest of them in a year of scant rainfall will put forth one or two perfect blossoms of average size on a stem so impoverished and insignificant that one sees only the bright flower, lifted less than an inch above the ground.

They frequent the Inyo, Mojave and western Colorado deserts, southern Nevada, northwestern Arizona and Utah.

Mimulus fremontii

Somewhat similar to the preceding species, but the flowers are not closely clustered at stem tips. The corolla is bright purplish-pink or rose-red with purple streaks at throat and 2 yellow ridges at base of lower lip. It is an emigrant from the coast ranges, taking root along the



Mojave Monkey flower. Photo by the author.

southwestern borders of the Mojave desert, from the Tehachapi to the western San Bernardino mountains, being especially pleasing in the Joshua forest of the Hesperia region.

Mimulus mohavensis

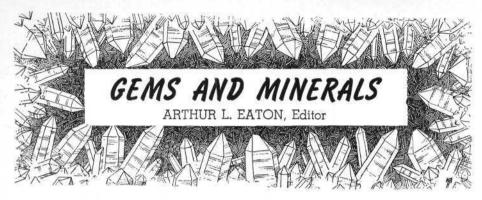
Exceedingly interesting is this unique species, one of my floral pets. The illustration shows both an average plant and one unusually lusty. It is a low leafy annual, single-stemmed or branching, from 1 to 5 inches high, hairy and somewhat sticky, the herbage more or less reddish or wine-color. The numerous flowers are short-stemmed and crowded in with bracts and leaves. The conspicuous puffed-out calyx has deep folds and triangular sharply-pointed teeth. It is a very loose fit for the corolla tube and enlarges considerably in fruit. The deep crimson or winered corolla spreads out a 5-lobed salverform limb broadly white-margined. It is not very common even in its limited area, the central Mojave desert. Look for it in the Barstow, Calico, Ord mountain region, where you are likely to find scattered colonies about the lower slopes, draws and canyon washes.

Mimulus guttatus

The Common Monkey Flower is widespread over most of the West, not omitting the deserts, flourishing about springs and streams. Its succulent herbage, both stems and tender leaves, are edible as fresh salads or cooked greens and were relished by the early settlers and miners as "wild lettuce." It is extremely variable in size, from a slender dwarf variety a few inches high to a robust luxuriant form sometimes reaching a height of 3 feet, as along the Mojave river at Oro Grande, where a lush growth of it, rooted in the riverbed, widely borders the stream banks. The herbage is light green, the main stem hollow and the thin dentate leaves 1 to 3 inches long, oppositely disposed, the upper ones sessile and often clasping the stem, the lower ones petioled. The bright flowers grow in showy terminal racemes, the corolla 1 to 11/2 inches long, golden-yellow, spotted with dark red, purple or cinnamon at base of lower lip.

Mimulus cardinalis

The Scarlet Monkey Flower, another of the water-loving species not primarily of the desert, is quite the most vivid and arresting. It is a branching perennial herb 1 to over 4 feet high, responding so well to cultivation it long has been domesticated, particularly in England. Its herbage is very sticky-hairy, the sessile serrate leaves are ovate to almost lanceolate, 2 or 3 inches long. The brilliant flowers are rather long-stemmed, the angled calyx tubular-bell shaped, the velvety scarlet corolla 2 inches or so long, noticeably 2lipped and yawning, the erect upper lip with 2 revolute lobes, the 3-lobed lower lip reflexed. It is more common in Arizona than in other desert areas but is found also in southeastern Utah, Nevada and California.



POLISHING HINTS GIVEN BY EAST BAY MEMBER

A member of East Bay mineral society reports that tests recently made indicate that pure uncontaminated diatomaceous earth is a good substitute for tin oxide or rouge or other commercial polishing agents. To prepare, take a bit of unpainted wire screen, roll the long way to give a springy effect, tack one end to a board leaving the other free. Rub the material over the screen as one would a grater. The wire will shave off the earth in such a finely pulverized condition that no grit can be detected by the fingers. Levigate to still further fineness. Diatomaceous earth is found in nearly every county in the state. See Bulletin 113, state division of mines.

SANTA MONICA GROUP CONTINUES ACTIVE

"Erosion" was the subject of a talk given by Professor W. R. B. Osterholt, faculty member of the Santa Monica junior college, at the May meeting of the Santa Monica gemological society. Prof. Osterholt's interesting topic was illustrated by slides showing the various results of erosion throughout the world. Prof. Osterholt is a member of the society and is giving a series of lectures pertaining to geology which are proving interesting and instructive.

The meeting was presided over by Harry Stein, newly installed president of the society. Due to gasoline and food rationing, installation of officers was held at the regular April meeting. Other officers are: Mrs. Rose Parks, vice-president; Mrs. Helen Richmond, recording secretary; Mrs. Myrtl Cadieux, corresponding secretary; several other offices were also filled.

After having made three field trips of very limited distances which included a trip to the Hollywood hills to an old copper mine where some azurite crystals were found, and to a rock quarry in the same vicinity for baturalite specimens, Verne Cadieux, past president, suggested that for the duration the club visit various members' homes and follow the general discussion and exhibition of specimens by potluck dinner. In this way, members would have the opportunity of discussing minerals and their peculiarities—and what rockhound doesn't want to talk about rocks?

Meetings are now being held on the grounds of Santa Monica junior college, Bungalow 28, and in spite of dim-outs and war time difficulties, are being well attended.

General Electric news digest is authority for the statement that General Electric recovers or uses more than 1,000,000 pounds of scrap metal every day of the year. An average of 14 carloads of salvaged metal is shipped to mills and smelters daily. Some Holtville, California, Future Farmer boys figure that the 650 tons of scrap metal salvaged by the Holtville boys and their helpers would keep the General Electric corporation busy exactly 30 hours.

DYED BRAZILIAN AGATE PRODUCT OF GERMANY

Brazil long has been famous for the quantity, quality and size of its agates. Until recent years, the agate of Brazil was almost the only agate of commerce. Much of the best agate still comes from the Brazilian state of Rio Grande do Sul, southernmost state of Brazil and near neighbor of Uruguay, another South American country famous for its agates and other quartz gems.

Much of the agate of Rio Grande do Sul comes in very large nodules or geodes, beautifully marked and lined but poorly colored. A great deal of this material was shipped to Germany in former years, artificially dyed with various shades and colors of aniline dye, and sold on the world market as real. Literally thousands of German immigrants, almost half a century ago, moved to Rio Grande do Sul in order to have some part in this industry.

COLORFUL MINERALS

CELESTITE

Celestite (strontium sulfate), source of red flame in peace time fireworks, has taken an important roll in war supplies. Approximately every fifth bullet fired from American machine guns is a tracer bullet. The combustible pellet attached to these bullets contains celestite. It ignites as bullet leaves gun, enabling the gunner to observe the accuracy of his aim.

Celestite produces the dazzling red flame in military flares, parachute distress signals, flares shot to the surface from submarines and water borne "balls of fire," used to illumine enemy ship movements.

In peace time celestite had many uses besides fireworks. It brightened paints; served as filter for impurities in caustic soda; was used in some medicines and sedatives; in railroad flares; in distress rockets and in road flares for stalled trucks.

Celestite is usually found in sandstone, limestone or veins of clay. California has one of the largest deposits in the U. S. It occurs from New York to Tennessee and has been mined in Texas where it is ground and used as an admixture in oil well drilling.

The question has been asked: "If magnesium is really one of the lightest of all metals, even lighter than aluminum, why not use pure magnesium in the manufacture of airplanes?" The answer is a fairly simple one. The lightness and toughness of magnesium would make it very useful in many ways, but it is highly inflammable. Thin sheets actually can be set in flames from a single match or small fire of any kind. It is the chief material of incendiary bombs. So think what would happen to a plane made of pure magnesium, if hit by a hot tracer bullet!

CARNOTITE

Carnotite seems more like a mixture of several related but unnamed minerals than a single mineral. It is commonly found as a yellow powder within the veins, or coated on the outside of sandstone. Sometimes it is found as loose, granular masses, with very poor cohesion.

Carnotite is one of the chief sources of uranium, vanadium and radium. One ton of carnotite produces about one half of one percent uranium, about three percent vanadium, and hardly more than a trace of radium. It takes about 1,000 tons, or 2,000,000 pounds of carnotite to produce a single gram of radium, or about 28,000 tons of this ore to produce an ounce of the very valuable element. Only pitchblende, or uraninite, is a more valuable ore of these rare elements. Colorado and Utah are the chief sources of carnotite in the United States.

Everyone Will Be Affected

by this war before it is over. By now there are few people who have not felt the effects of the Allied-Axis conflict. Rationing and increased prices have been felt by everyone.

This firm is no longer able to do business on the same basis as before the war. The head of the firm, John M. Grieger, has been a member of the United States Army for the past eight months. During this time the business has been and will continue to be conducted by his father, Wm. J. Grieger.

There has been an increased demand for mineral and ore specimens. A great many of our orders have carried high priority ratings for machinery, abrasives and saw blades. Needless to say, we have given all such orders immediate attention.

There have been delays in filling orders and answering correspondence. To get as much done as we have, it has meant working long hours seven days a week. Our place of business has been closed to drop-in trade but in spite of this we have not been able to keep up with the mail orders.

If your order has been unduly delayed and you have not received an acknowledgment, drop us a post card. Our present plans are to suppress advertising until we have orders on hand filled. The magazines need all the advertising support they can get so we will continue to have an ad of some kind. Orders for many items are easy to fill and we will continue to run ads on these.

Due to the fact that we have had so many orders for minerals, we now desire to enlarge our stock. What stock of surplus minerals do you have? We need minerals in lots of 100 lbs. or more. Cash or liberal trade allowance offered.

You are respectfully requested to address all mail to WARNER & GRIEGER so that the number 4 will appear between the names Pasadena and California, as shown below:

WARNER & GRIEGER

405 Ninita Parkway PASADENA 4, CALIFORNIA Our Phone Number is SYcamore 6-6423

Walter W. Bradley, state mineralogist, announces that revised papers on quicksilver and antimony are now available for distribution. They replace earlier papers on quicksilver and antimony in bulletin 124 (Geo. L. Gary) in order to keep mining interests of California up to date on changes concerning occurrence, preparation, uses, tests, markets and lists of possible buyers of California's critical ore minerals needed for the war program. A new paper on lithium is ready for distribution. Binders for the bulletin are now obtainable.

GEM MART

Adv. rate, 5c a word-Minimum \$1.00

HERE ARE BIG BARGAINS .

Rare Crystals of all kinds, \$1.50 and up. Montana Sapphires, cutting quality, 60c a carat. Sawed California Geodes, 25c and 50c each. Send for my Gem List, 10c, cost returned on first order. Specimens can be returned if not satisfactory. The Desert Rats Nest, 2667 E. Colorado, E. Pasadena, Calif.

ANTIQUE JEWELRY - Lockets, brooches, chains, rings, etc. 12 assorted, \$3.00. B. Lowe, Box 311, St. Louis, Mo.

AGATES, Jaspers, Opalized and Agatized woods, Thunder eggs, polka dot and other specimens. Three pound assortment \$1.50 postpaid. Glass floats, price list on request. Jay Ransom, 1753 Mentone Ave., Pasadena, Calif.

ZIRCONS-OPALS-CAMEOS-3 Genuine diamond cut Zircons (total 21/2 carat) \$2.75. Twelve Genuine Opals \$1.50. Twelve Genuine Cameos \$2.50. B. Lowe, Box 311, St. Louis, Mo.

NDIAN RELICS, Beadwork, Coins, Minerals, Books, Old Buttons, Old Glass, Old West Photos, Weapons. Catalog 5c. Vernon INDIAN RELICS, Lemley, Osborne, Kansas.

100 JEWELRY STONES removed from rings, etc., assorted \$2.00. B. Lowe, Box 311, St. Louis, Mo.

LAPIS LAZULI from Italian Mountain, Colo. Equal in color and quality to finest specimens in Smithsonian. Sawed pieces about 3/16 inch thick, with hard white matrix, at \$2.00 per oz. Finest quality, sawed slabs, deep Ultramarine Blue, matrix of gold pyrites, at \$4.00 per oz. ENDNER'S, Gunnison, Colo.

\$2.50 brings you prepaid, six rare and beautiful crystallized Arizona minerals. Vanadinite, Dioptase, Wulfenite, Willemite, Chrysocolla, Azurite. Specimens 1½x2 or larger. Wiener Mineral Co., Box 509, Tucson, Ari-

ROCKHOUNDS ATTENTION. Mudsaw complete with quarter-horse G. E. motor. Never used. \$40.00. \$32.50 without motor. 1444 Appleton St., Long Beach, Calif.

We have a large stock of Cabinet specimens, Gem material, Cut stones, Mineral books. We want to buy good gem material and specimens. Come and see us and join our Rockhound Colony.

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AMONG THE

ROCK HUNTERS

Florence Chapin was general chairman in charge of Sequoia mineral society's June pot-luck meeting at Holmes' playground club house, Fresno.

W. Scott Lewis reports in his bulletin organization of a mineral club for boys. President Laurence McGilvery, 1942½ North Bronson, and secretary Bruce Parker, 2123 North Gower street, Hollywood 28, are both 11 years old. A word of encouragement from experienced rock-hounds would not be amiss. The boys will go in for hiking and field trips. They hope in time to gain enough members to make feasible lectures and other activities.

B. Schlagenhauff suggests that probably new specimens will be exposed by bombing practice in field trip territory. He surmises, how-ever, that a "block buster" might come off second best in a contest with one of the rock hammer maniacs who always apparently used to precede club field trips to geode beds.

. .

Grand Junction, Colorado, mineralogical society sponsored one of the finest gem and mineralogical exhibits ever held in the Rocky Mountain region, reports Richard H. A. Fischer, president of the society. Cut and uncut specimens from all over the world were shown as well as local material. Some of the best specimens ever found in the district are still in possession of local club members. So outstanding was the exhibit that numerous requests have been made by civic organizations of the western slope for another showing. The exhibit was protected by a police guard.

Science department of Santa Barbara state college in cooperation with the museum of natural history presented a demonstration May 9 covering various phases in which science is helping win the war, such as applied camouflage, history of weapons, x-ray, plastics, steel and iron alloys, and natural rubber preparation.

June California Federation mineral notes and news prints an interesting study of mica by Ian Campbell, Pasadena, California, and a discussion of synthetic corundum by Isabel P. Westcott, Hanford, California.

East Bay elected following officers at May 20 meeting: George Higson, president; R. E. Lamberson, vice-president; F. W. Cochran, treasurer; Miss Ida Chittock, secretary; J. Lewis Renton, director.

At the June meeting of Los Angeles lapidary society following officers were elected and installed: Harry Ringwald, president; Belle Rugg, 1st vice-president; Herbert Monlux, 2nd vice-president; Howard McCornack, secretary; Mary Humble, treasurer; Lelande Quick, his-

W. G. Paden, superintendent of Alameda city schools, spoke on Juan Bautista de Anza's overland trip to California in 1775 at June 10 meeting of East Bay mineral society. His hobby is relocating and mapping old trails and routes. . . .

Death Valley Curly reports that he is using Mineralight to locate hydrozincite. It enables him to follow the ore even if he can not see the hydrozincite.

In the currently popular motion picture "The Ox-Bow Incident," a story of lynching the wrong gang in the old West, a leading role is played by the distinguished character actor Harry Davenport, member of Los Angeles lapi-

Mexico is now supplying the United Nations with quantities of antimony, mercury and zinc.

Bolivia is the present most important source of tin. 37,000,000 pounds were imported in

Powdered coffee in the Army's K ration is packaged in aluminum foil coated with a film of heat-sealed thermal plastic. This wrapping resists heat and cold, is impervious to light and moisture and is so tough that the coffee may be packaged in tablet form, then run through a crusher to reduce it to powder.

Curtailment on the manufacture of metal church goods will save annually 230 tons of brass, 80 tons of aluminum and smaller amounts of lead, tin and nickel.

Dora Andersen, Parlier, was given a farewell surprise party by her night school class May 20.

Selma lapidary class will meet Monday evenings only through the summer.

Buryl Schlagenhauff has resigned as editor of Long Beach mineral news due to press of business and civilian defense activities. Schlagenhauff always turned out a newsy and witty bulletin, and cooperated fully with Desert Magazine. He will be missed.

Tom Harrison, Hollywood, does art labels in exchange for worth while minerals, especial-

Emma Schray assisted by Ann Hartz entertained 15 Fresno members of Sequoia mineral society for regular May monthly study hour. Ella Bates led the discussion on quartz minerals. Isabel Westcott showed colored pictures of Yosemite and of rare minerals and crystals. June meeting was held at the home of Isabel Westcott in Hanford.

Northern California mineral society discussed scheelite at the May 19 meeting.

India is the chief normal source of mica. Due to shipping difficulties enough India mica is not now available. Brazil and Mexico are attempting to satisfy the war demands for this strategic mineral.

IMMUNE

By ORLANDO WEIGHT Pasadena, California

The evening sky flushed with purple and rose Displays its etchings in color for those Who worship its beauty from valley or mound. But the Rockhound keeps his eyes on the ground.

Flame and gold shot through with a turquoise blue

Replaces the rose and the purple hue. The clouds become castles of fairies renowned. But the Rockhound keeps his eyes on the ground.

He searches for art of the Master hand Imprisoned in geodes in Desert Land. Or the sunset fires in an opal bound. Yes, the Rockhound keeps his eyes on the ground.

BOOKS FOR THE ROCKHOUNDS

Here is a selected list of books for both the amateur and advanced student or collector in the field of mineralogy.

GETTING ACQUAINTED WITH MIN-ERALS, G. L. English. Fine introduction to mineralogy. 258 illustrations,

324 pages THE ART OF GEM CUTTING, complete second edition, Fred S. Young, gemmologist. Contains information on cabochon cutting, facet cutting, methods to test stones, the value of gem stones and useful

lapidary notes. Index. 112 pages\$1.50 HANDBOOK FOR THE AMATEUR LAPIDARY, J. H. Howard. One of the best guides for the beginner gemcutter. 140 pages. Good illustration \$2.00

QUARTZ FAMILY MINERALS, Dake, etc. New and authoritative handbook for the mineral collector. Illustrated. 304 pages

MINERAL IDENTIFICATION SIMPLI-FIED, O. C. Smith. Complete table of all known minerals with simple methods of testing for identification. Gives specific gravity, hardness, color, streak, luster, cleavage and composition. Index. 271 pages .

DESCRIPTIVE LIST of the New Minerals 1892 to 1938, by G. L. English. For advanced collectors. 258 pages \$3.00

FIELD BOOK OF COMMON ROCKS AND MINERALS, by Frederic Brewster Loomis. Fine handbook for collectors. Beautifully illustrated. Includes 67 colored plates for identifying gem crys-\$3.50

HANDBOOK FOR PROSPECTORS, M. W. Bernewitz. Complete guide covering mining law, methods, occurrence and identification of minerals. Illustrated, New, enlarged, revised edition.

547 pages

JEWELRY, GEM CUTTING AND METALCRAFT, William T. Baxter, A handbook for the craftsman, designed for the amateur in jewelry-making, metal-craft and gem-stone cutting, Illustrates and describes methods and tools\$2.50

FLUORESCENT LIGHT AND ITS AP-PLICATION, H. C. Dake and Jack De Ment. New, complete book on history, theories and applications of the spectacular phenomenon of fluorescence. For both the professional and layman. Extensive bibliography. \$3.00

NEW WONDER SET .

Of gems and minerals includes jasper, obsidian, turquoise, gypsum, silver galena, asbestos, blue calcite, graphite, opal, copper ore, tourmaline, actinolite, marcasite, iron pyrite, fluorite, onyx, petrified wood and gold ore.

Set contains streak testing block, bottle of mounting glue, small hand lens, 25 printed mounting cards, and instruction manual for gathering and classifying your gem collection _____\$1.50 Same set without glue, lens or cards\$1.00

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EL CENTRO, CALIFORNIA

Cogitations

Of a Rockhound By LOUISE EATON

Rockhounds can't understand folks who visits at their houses, sees their precious speciments and polished rocks n don't get bit by the rockitis bug. Such a attitude seems just about unhuman. The rockhound wonders if maybe his guest is a bit weak in his head or p'rhaps just inattentive. So Mr. Rockhound redoubles efforts to sell the rock idear to his friend. Both feels uncomfortable till they can get to a mutually interestin'

Considerin' the shoe ration situation, maybe rockhounds is unexpectedly lucky not to be able to make field trips. Sometimes a pair of boots gets wrecked beyond fixin' on a hike over rugged terrain. So maybe it's fortunate that shoe stamps don't hafta get used up for field trippin' foot-gear. 'Twouldn't be much fun goin' barefoot next fall.

One important lesson learned on the desert is patience. You just can't go about extractin' a fossil 'r ledge agate rashly 'n carelessly 'r you ruin your speciment. Searchin' for rocks calls for patience too.

ATTUNED

There's a mood that comes with the desert eve, Not longing nor sadness nor joy, When affairs of earth seem of no concern And nothing your calm can annoy

For you bare your soul to the Infinite-All thinking and effort you cease. Then the God of mountain and desert waste Sends quiet, contentment and peace.

First informal gathering of Mineralogical Society of Arizona for the summer was June 6 on Arizona museum grounds. It was an old-fashioned picnic (with new-fashioned ration coupons). Thirty-two members and over 20 guests were present to enjoy the fried chicken and home-made cake. Farewell gift was presented Jim Blakeley, junior member, who was leaving for the armed service.

Dr. Alexander Goetz discussed uses of silver, past and present, at June 11 dinner meeting of Pacific mineral society. Dr. Goetz is at present doing research work at Caltech. He has held chairs in Goettingen, Imperial university of Japan and University of Mexico. Wm. C. Oke displayed some of his Franklin district minerals at this meeting.

San Fernando valley mineral society enjoyed a potluck dinner June 20 at the home of Mr. and Mrs. W. D. Taylor in North Hollywood. A business meeting and auction sale of rocks followed the dinner.

. .

Brazil is the world's largest source of quartz crystal. The entire surplus beyond domestic needs goes to the United Nations. Brazil also furnishes beryl ore and industrial diamonds. . . .

Restrictions on the manufacture of caskets save more than 64,000 tons of critical metals each war year.

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SELECTED, PERFECT, AWLESS, DEPENDAB FLAWLESS, DEPENDABLE
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Cabochons, Etc. WHY GAMBLE?

How often have you purchased a pound or so of what looked to be material suitable for gemstones—only to find it so fractured and pitted you had to throw it away?

ROCK-A-CHUCKIES take the gamble out of the picture. LOOK AT THE LIST OF FINE GEMMY MATERIAL BELOW — THEN CHOOSE!

Lapis Lazuli Sardonyx Genuine Jade Green Jasper Flowering Obsidian Onyx Yellow Jasper Red Jasper Black Obsidian Multi-colored Petrified

Wood Rouge Blanca Myrickite Chrysocolla Black Wood Moss Agate Cinnabar Opalite Jet Red Hematite Sodalite Dumortierite Rhodonite California Bloodstone White Jade (Siam) Brazilian Agate Brazilian Agate Belgian Chert Eden Valley Wood Moss Opal Green-red Moss Agate Nevada Wonder Stone Brecciated Jasper Orbicular Jasper Utah Jade Vesuvianite Double-flow Obsidian

ANY THREE FOR \$1.00
ANY SEVEN FOR \$2.00
ANY TWENTY FOR \$5.00
Cutting and Polishing a SpecialtyReasonable Prices

SPECIAL! A few Rock-a-chuckies in ring, brooch and pendant sizes, in outstanding patterns and designs. Ring size, 65c; brooch, 90c; pendant (drilled in proper place), \$1.25.

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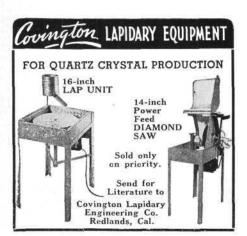
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AMATEUR GEM CUTTER

This page of Desert Magazine is for those who have, or aspire to have, their own gem cutting this department, is former preside to anywar questions in connection.

and polishing equipment. Lelande Quick, who conducts this department, is former president of the Los Angeles Lapidary society. He will be glad to answer questions in connections with your lapidary work. Queries should be addressed to Desert Magazine, El Centro, California.

By LELANDE QUICK

This issue begins the second year of AMA-TEUR GEM CUTTER. What a pleasant stint it has been and how much it has taught me! The greatest pleasure has been the steady flow of letters that have come to me from all over the country and the new friends this correspondence has brought me. It does seem strange however that I have received several letters from New York and Connecticut and none from Utah or New Mexico. I suppose the numbers of rockhounds and subscribers in these western states greatly outnumbers those from the eastern states and their gem varieties are legion.

Much has happened in the past year and much will happen in the next but the peaceful calm deserts maintain their awesome silence with always as many rocks—but fewer cans and bottles. This writing of gems every month in these times, with the necessary shackles on field trips, becomes a continual whistling in the dark but each month is a month nearer the restoration of "the pursuit of happiness." The well running suddenly dry, temporarily, will increase our thirst for the desert with its "sermons in stone"."

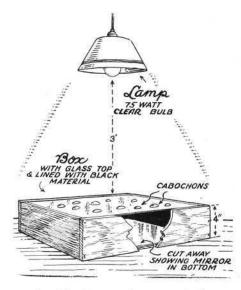
On every hand you hear of what the peace will bring. There will be building materials, automobiles, radio and television undreamed of and there will be gem cutting equipment undreamed of. Human ingenuity has been awakened. Heretofore it merely has stirred in its sleep but now it is wide awake and astounding machines will be devised for gem grinders. And then maybe it won't be much fun. We'll see.

On the right is a diagram of Albert Hake's arrangement for the display of iris and asteriated materials. The light can be a bridge lamp but the globe must be clear; a frosted globe doesn't work. The light should be about three feet from the stones displayed. The stones can be arranged on a sheet of plain glass set on the top of a box about four inches high and as large as you want it. There must be a mirror in the bottom of the box and the inside walls should be covered with black material.

The Gem Theater, shown by Russell Grube at the recent show of Los Angeles lapidary society, contained an outstanding assortment of pink and grey rhodochrosite. This material is magnificent to look at and easy to cut because it is only 31/2 in hardness but it's harder to polish than nearly any rock I know. But Mr. Grube, who has had great success with rhodonite, also difficult to polish, has had great success with rhodochrosite. The secret seems to be the same as with the so-called Death Valley onyx. Just polish it with tin oxide as usual and then when you've finished begin all over again. When you finally get discouraged put it away until your interest is renewed, then haul it out and begin once more. Suddenly it's finished and as smooth and shiny as a Russian general's head. Oxalic acid in the tin oxide does so much for onyx I wonder if it would help on rhodochrosite. Think I'll try the old carpet-covered-scrub-brush-back trick and a vigorous hand-rub with oxalic acid-tin oxide paste.

A few weeks ago I called on Otto Ehlers in

A few weeks ago I called on Otto Ehlers in San Jose who brought from Argentina most of the rhodochrosite sold by the dealers at fancy prices. He has about five tons of the finest material ever found and he was most generous with



samples. The lot contains some of the rare candy stripe material which looks like Wavellite in two shades of pink. This material is more difficult to polish than the bright pink with manganese inclusions but it is very rewarding when finished. Every collection should include some of this really beautiful material.

include some of this really beautiful material.

Strangely enough Mr. Ehlers hauled the rhodochrosite from Argentina not knowing that it occurred at Alum Rock park, five miles from San Jose, according to Rogers in the American Journal of Science for April, 1919. As a matter of fact this material exists in 13 California counties but not in gem quality as does rhodonite which also occurs in 13 counties. Both gem materials occur in most manganese deposits.

On a recent trip to San Francisco I used the opportunity to stop, coming and going, at the new sagenite agate location near Nipomo which I discussed in June Desert Magazine. In a half hour I gathered more and better material than I used to get in two days at other well known locations. I was lucky, for the rancher was cutting grain and I practically followed him around the field. I fulfilled a dream I've had for a long time for I found a spot about 100 yards square covered with rocks and nearly every one was gem quality. I found lemon, carnelian, peach and striped agate and agate with white spicules and red, yellow, black and brown moss inclusions. There was no evidence that anyone ever had been there with a hammer. The weather was perfect and only one thing cast a shadow on this delightful experience-I was alone. Some time soon I want to return with at least a car full of fellow sufferers.

DID YOU KNOW . .

- Gold has been found in every one of the 56 California counties; is now actively mined in two thirds of them.
- Silver exists in 11 California counties, copper in 27, zircon in 24, diamonds in 8 and platinum in 24.
- Tourmaline has the same index of refraction as carbon disulphide. Therefore if you put the tourmaline in a carbon disulphide solution it will tend to disappear, but the flaws will show clearly.

Mines and Mining . .

Washington, D. C. . . .

Holidays are out for the duration in aluminum and magnesium industries to insure maximum production of these essential materials, Charles E. Wilson, vice-chairman, has declared. Ruling orders work on Sundays preceding or following holidays and on all holidays except Christmas.

Kingman, Arizona . . .

Katherine mine owned by Gold Standard Mines corporation closed for the duration with an auction sale of mining and milling machinery. Formerly owned by late Charles Sutro, the mine has been functioning since 1905 and has been in constant operation up to the time when the government stopped all gold mining.

Salt Lake City, Utah . . .

Electro-chemical plant, designed to treat low-grade tungsten concentrate and ore has been completed and its furnace units fired into readiness. To encourage small tungsten mines, bonuses have been offered to properties producing less than 100 short tons. Production is expanding and the number of these mines is expected to increase.

Miami, Arizona . . .

Castle Dome company began operation of a new mill handling ore from open pit mines. It has been under construction for 16 months and will employ some 200 workers. R. L. Mountjoy will be superintendent.

Washington, D. C. . . .

Regulations for public leasing of silica sand lands in Nevada have been announced, authority granted by an act of congress in May. Units will be subdivisions of not more than 640 acres located in squares or rectangles. Royalty rates and rentals will be fixed prior to issuance of the leases, and will not be less than two percent gross value of the minerals.

Virginia City, Nevada . . .

Liberty ship launched at Richmond, California, has been christened the Adolph Sutro in honor of the famous mining engineer. Sutro, past mayor of San Francisco, is accredited with the building of a six-mile tunnel on Comstock Lode for release of water power. His many gifts to San Francisco, including gardens and libraries, were acknowledged at the ceremony when the ship bearing his name was launched.

Beaver City, Utah . . .

A veritable fairy land of shimmering tungsten crystals met the eyes of Lewis Lessing as he explored abandoned workings with a fluorescent lamp. Tungsten, vital to modern industry and warfare, has been discovered in Big canyon in quantities sufficient to warrant the development of an important enterprise in the section, it was stated by Senator Abe Murdock. The surface showing of the tungsten has outcroppings for a distance of six to eight miles along the lime-granite contact, one of the largest deposits the world has known, Lessing, Ross Cutler, and Ambrose McGarry and their associates are in charge of operations.

Las Vegas, Nevada . . .

Tenth and last metal producing unit of Basic Magnesium, Inc., world's largest magnesium plant, was put into production June 26. Plant is now exceeding rated capacity of 150 tons of metal daily. Entire building program, started October, 1941, is expected to be complete by early fall.

Salt Lake City, Utah . . .

SALT LAKE CITY—Censorship of mineral production figures is giving rise to pro and con discussions of its value. Most engineers and operating officials agree that censorship of statistics on iron ore, copper, lead, zinc and molybdenum is useless since accurate information is probably already in hands of enemy governments. However, even justifiable restriction of information on scarce metals like tungsten, magnesium, chromium and vanadium works hardships on trustworthy producers to whom these statistics are extremely important.

Bishop, California . . .

Automatic draft exemption for mine and smelter workers in non-iron metal industries is anticipated from statements by Gen. Louis B. Hershey, Paul V. McNutt and Chester Davis. Plan, if adopted, will affect 15,000 skilled and unskilled workers in Southern California manpower area, and about 10,000 at Basic Magnesium, Inc., near Las Vegas, Nevada.

Barstow, California . . .

Martin R. Guenzel, engineer, has begun development of tungsten mines at Goldstone, California, it was reported early in June. He made a thorough investigation and was impressed with possibilities of production in that area. Large quantities of rich scheelite have been blocked out.

Winnemucca, Nevada . . .

Red Bird mine of Harold's Club company has disclosed a supply of rare minerals, identification being made by United States bureau of mines. Among the minerals, some never before reported in the state, is zinkenite, a combination of antimony and lead, and other lead carbons and oxides. Previous operations missed the rich deposits by only 18 inches.

Trona, California . . .

With impressive ceremony the E Flag was raised over American Potash and Chemical corporation June 23. Formal presentation of the Army-Navy production award is the first of its kind to take place on the Mojave desert. In the address by Harry W. McNeil an appeal was made for workers to raise even further the production goals.

Washington, D. C. . . .

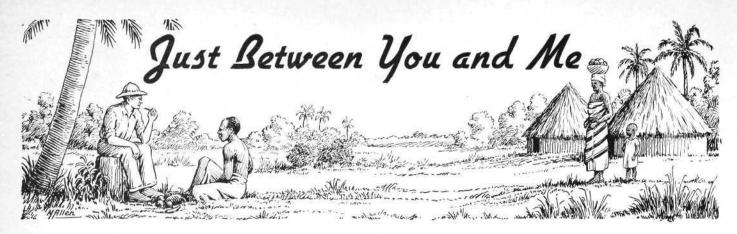
Western operators' plea for modification of WPB order closing non-essential gold mines was rejected by the board. Mines were closed eight months ago to increase available labor supplies and step up production on other metals. Mine operators however protest that labor supplies have not increased and the mining communities have suffered because of the order.

Winnemucca, Nevada . . .

Discovery of high grade tungsten ore which will run \$1,500 per ton is reported from the Ben F. Pasch mine 27 miles northwest of here. Assay made recently by Nevada-Massachusetts tungsten laboratory near Mill City showed ore running 46.82 percent. Five tons have been shipped to Metals Reserve depot at Battle Mountain. Extension of operations depends on construction of 41/2 mile road to the property which has been applied for under access roads to mines program. If built road will connect with the road to once active mining center, Daveytown, at which only present resident is reported to be Jay S. Jones, mining man.

Reno, Nevada . . .

Mining Record reports platinum production is under way seven miles east of Rawhide on southeast edge of Hot Springs flat where operations of Rogers Lake mine and development company for two years have just passed the development state. Values are in five rare metals, including platinum, iridium, osmium and palladium with a small amount of rhodium. Gold and mercury also appear in the black sands. Principal values are in osmiridium, an alloy of osmium and iridium. Equipment for handling the placer deposits has been installed by J. H. Maccartney of San Francisco.



By RANDALL HENDERSON

USHTOWN, AFRICA—On one of my trips out into the Bush country the trail passed near a mountain—or at least, it was the nearest thing to a mountain I have seen since I came to Africa. It really is just a big butte standing out alone on the African savanna, a conspicuous landmark that can be seen 40 miles away. The natives call it Osudoku.

Steep grassy slopes led up to a precipitous escarpment on one side, and the other sides were covered with the myriad greens of

a tropical jungle.

In a nearby village, a native who spoke fair English told the story of Osudoku. Until 22 years ago it was the hideout for a savage tribe of black bandits who preyed on the surrounding villages. Finally the outlaws were dispersed by soldiers. But the natives in that region still have a superstitious fear of the butte. The trail that once led to the top long since has disappeared in tropical shrubbery.

Since any mountain, anywhere, is a lure that no desert rat can resist, I arranged to go back two weeks later to see what I could find among the rocks and thickets of Osudoku's summit. Two soldiers from camp accompanied me. Mountain-climbing in the tropics is arduous work, and we were drenched with perspiration long before we scaled the last rock parapet.

Never have I seen so much broken pottery in one small area as we found on the top of the mountain. Shards were everywhere—not much different from the broken bits of pottery that mark the old campsites of the Cahuilla Indians in Southern California. Some of the ollas had been big enough to hold a barrel of water, and were placed to catch what rain had drained from sloping rock surfaces. Evidently the soldiers who raided the place had gone on a pot-busting spree—presumably on the theory that one way to discourage banditry in that area was to smash all the outlaws' cooking utensils and water vessels. Anyway, they did a thorough job.

I found two small ollas intact in a tiny cave—and left them there. They were too fragile, and the trip too long, even if there was transportation for a pot-hunter's loot.

I searched among the potsherds for stone tools or weapons but found not a chip of obsidian or the flint rocks used for making arrow and dart points. Probably these natives, following an old African custom, used poison instead of stone to slay their game and enemies.

The savages evidently lived in caves, and in pits thatched over with grass—but in this land of heavy rainfall and fast-growing vegetation the relics of an abandoned settlement soon disappear. There were many metates, but metates are no novelty here. In Africa, native women continue to grind their grain with stones even in many of the larger towns where more modern tools are available.

I've prowled over the desert for years looking for old Indian pottery—and it is one of the ironies of fate that I should find my first ollas in a cave away off here in Africa where I could

not possibly take my relics home. But I will always have a pleasant memory of my trip to the summit of Osudoku.

From a stock room adjoining my office we issue all kinds of games and athletic equipment. By merely signing his name in the register, a soldier can draw a basketball, a tennis racquet, cribbage board, cards, dominoes or a score of other recreational items for use during the day or evening.

During a slack hour one evening I asked Augustus, the native boy who was on duty as stock clerk, if he could play checkers. "I play African checkers," he replied. I was curious about this African game and I asked him to get out the board and show me how. It is more intricate than the American game—you can iump forward or backward and the king can go all the way across the board and back in one hop—and Augustus won three straight games. Obviously, I had to do something to save face—and so we got out the Chinese checker board. Since Augustus never had seen a Chinese checker game I was able to restore the prestige of the great white race.

Folks whose knowledge of Africa comes only through the movies or from stories of African game hunters, do not realize that there are two Africas. One is a land of ignorance and superstition and savagery—of voodoo doctors and poisoned arrows and licentious practices. The other Africa is not so well known. It is emerging from the schools and missions now found even in the darkest parts of the continent.

These people learn quickly, and they have a great desire to acquire the civilization of the white man. English and French are now as widely spoken as many of the native dialects. At this field where hundreds of natives are employed. I often hear the tribesmen talking among themselves in pidgin English because they do not understand each other's dialect.

What is true of Africa is true to a more or less degree among the dark-skinned races all over the earth. These people have glimpsed the white man's way of life, and they want a better world for themselves. It is to our interest as well as theirs that in the great reorganization which is inevitable after this war they be given an opportunity to acquire a higher standard.

We are nearing the end of our rainy season here and the African hills around camp are lush with vegetation.

But there is too much green. It becomes monotonous. I miss the reds and yellows and purples and the ever-changing pastels of the desert landscape. Nature has given this land a lavish endowment of plant life. But I have lived too long in a land of precipitous canyons and serrated hills and dunes and peaks and playas ever to feel at home here. I want to stay until the last gun is fired—and then take the shortest route back to Seventeen Palms oasis in the Borrego Badlands where there is more character in one square mile of landscape than there is in all this part of Africa.

BOOKS OF YESTERDAY AND TODAY

DRAMATIC STORY OF A DESERT RIVER TOLD

The Humboldt river, which flows stubbornly through the withering Nevada desert to disappear ignominiously in the Carson Sink, nevertheless, played an important part in the development of the West.

Its dramatic story, told by Dale Morgan and illustrated by Arnold Blanch, is an important addition to the Rivers of America series. Under various names, the Humboldt became the paradox of the desert country. It was a vital factor in the lives of emigrants, miners and soldiers. It made possible westward extension of transportation. And yet, it was one of the most hated rivers in America.

From the days when the Spaniards first set foot on what is now Nevada to the tragic plunge of a modern streamliner into its alkaline waters, the Humboldt's history has been one of harshness and cruelty but it could scarcely be otherwise, rising as it does in desolate, civilization-resisting

The forty-niners, moving west out of the pitiless Salt desert counted on the Humboldt to carry them through the hardships ahead. Reaching it, exhausted and with food supplies dwindling, they found only inadequate growths of wild hay near the river and the water as Mark Twain expressed it, "like drinking lye, and not weak lye either."

But settlers were as stubborn as the river. Trading posts appeared. Sheep and cattle were brought in to feed on the grass in the meadowland pockets. As conditions improved, the harshness of the Humboldt was tempered for those who sought the good that was in it. There was charm in the rugged, brilliantly stained mineral mountains and in the rocks of the deep-cut gorges.

Today many of Nevada's most important towns are situated along the winding route. Elko, Winnemucca and Lovelock all are trading centers for the valuable ranch and mining country more extensive than New Jersey, Connecticut and Rhode Island combined.

More bizarre than fiction, the story of the Humboldt river is adventurous reading, yet history authentically told.

Farrar and Rinehart, New York, 1943. \$2.50.

-Marie Lomas

MYSTERY WRITER TELLS OF SOUTHWEST TRAVELS

Mary Roberts Rinehart readers who have enjoyed her excellent detective and other stories will be pleasantly surprised to find that she also is an experienced camper and has written a book, THE OUT TRAIL, about her adventures while exploring the desert.

With the same gay, humorous style that characterizes so much of her work she entertainingly describes her many excursions into the romantic Southwest. "On the trail that is always new" she rides, hunts, explores, and catches such marine creatures as would make any fisherman's heart beat faster. She visits the cliff dwellers, Grand Canyon, Petrified Forest, and journeys deep into Mexico; each place becomes alive and newly interesting.

There are the more serious moments when with feeling she portrays desert scenes that she has known and admired. . . . the Indians . . . stood on the rocks in the early rose of the dawn, alone or in silent groups of twos or threes, grave, watchful, and wonderful to the eye. No words, no painting, can ever tell the exquisite pathos of that picture—the roseand-gold dawn, the purple desert far below, and on the ancient rocks these immobile brilliant figures, dying survival of a lost civilization . . .

Mrs. Rinehart's sense of drama and color liven each incident and adventure, from shooting crocodiles at midnight to the comparatively mild sport of buying dolls on Indian reservations. Despite the fact that she has been "shaken, thrown, bitten, sunburned, rained on, shot at, stone-bruised, frozen, broiled, and scared, with monotonous regularity" it has not daunted her enthusiasm for the out-ofdoors. This enthusiasm she quickly imparts to her readers in THE OUT TRAIL.

Robert M. McBride and Company, New York, 1932. 246 pages. \$1.00.

-Aliton Marsh

ALLEGORY GIVES DESERT'S SPIRITUAL MEANING

Not long ago I heard a well-known literary critic say, "The mere mention of the name Antoine de Saint-Exupery immediately conjures up visions of deserts. I can see them, feel them as vividly as when they are actually before me."

The expression was not unusual. To most lovers of the desert country, whether the desert is in Africa or in America, de Saint-Exupery's books symbolize the in-

spirational in the desert wherever it may

Again the author has made available to humanity at large an allegory, THE LIT-TLE PRINCE. The story is simply told, beautifully presented. Its meaning runs as deep as the ability of the reader to fathom the desert's meaning. The impish little character of the Prince wanders from star to star seeking his cherished dream. Finally arriving on earth he wanders onto the empty desert where he finds the things he

The story is short but its spiritual values lend strength to the brief adventures. It is a story for both young and old, a fairy story it is true, but the truths it imparts are applicable to everyone. Above all, it reminds us that if we are ever to find complete understanding and learn the secret of what is really important in life we must return to the desert.

Reynal and Hitchcock, New York, 91 pp. Illustrations in color. \$2.00.

-Marie Lomas

PUEBLO INDIAN VOLUME IS VALUABLE HANDBOOK

Civilization of the Pueblo Indians, described colorfully and completely, is the subject of THE RAIN-MAKERS by Mary Roberts Coolidge.

Mrs. Coolidge has studied these Indians for many years, and describes thoroughly the background of their arts, industries, religious beliefs and social life.

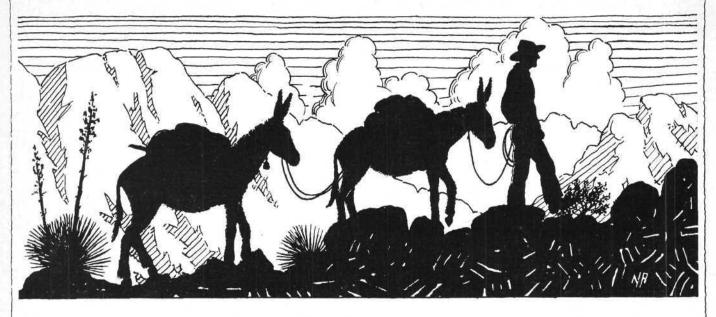
The book presents the history of the Pueblos from the time of the Spanish Conquest and the arrival of the Catholic missionaries. There is a brief description of each of the 29 villages, the most prominent being Acoma, Hopi, Oraibi, San Ildefonso, and Zuñi,

A chapter is devoted to the cultivation of corn and the manner of preparing it. The chief food plant of the Southwest Indians, it is also symbolic—a sign of friend-

Arts and industries are detailed. They include rug-making, basketry and weaving, pottery making, turquoise, shell and silver work, sand-painting and watercolors, together with the symbolism employed in the various crafts. The fact that 'all art, all handicraft, all customary living among the desert tribes is permeated with rain significance and must be interpreted through it" is evidenced in the symbols of rain used widely in Indian wares.

A colorful, realistic picture of the various Indian tribal rites and dances leaves the reader with the hope that modern civilization and commercialism will not eventually destroy their primitive culture or the significance of their ceremonials. Published 1929 by Houghton Mifflin company, Boston, 397 pp., 22 illustrations. \$4.00.

-Evonne Henderson



Follow the Desert Trails . . . IN BOOKS! . . .

Here are books that will take you to wild and remote Indian Country.... Lead you back through fantastic chapters of history.... Enchant you with legends and lost treasures. Here are books that will give you the warm human side of living in a desert land...

101 MESA LAND. Anna W. Ickes. Enchantment of Southwest, brief history of Arizona and New Mexico, leading Indian tribes. Illus., index, 236 pp. \$3.00

102 MESA, CANYON AND PUEBLO, Chas. F. Lummis. A classic desert volume to take down from your bookshelf year after year. The land, customs and occupations of the Southwest Indians. Over 100 photos, map. 517 pp. _______\$5.00

103 DESERT COUNTRY, Edwin Corle. Indian tribes, ghost towns, legends, oases, history—from the Border to Nevada, from the Mojave and Death Valley to the Grand Canyon. 357 pp., index \$3.00

110 KIT CARSON, Stanley Vestal. An exciting biography and one of the most illuminating books on the old frontier, 297 pp. \$1.50

111 A COWMAN'S WIFE, Mary Kidder Rak. With rich imagination, wit and spontaneity, a woman records her life on a southern Arizona ranch. Illus. by Chas. Owens. 292 pp. \$2.75

112 DESERT WIFE, Hilda Faunce. An unforgettable account of the author's pioneer life among Navajo Indians. Block prints by W. Langdon Kihn. 305 pp. _______\$3.00

120 THE RAIN MAKERS, Mary Roberts Coolidge. Absorbing study of Southwest Indian civilization. Comprehensive, scientific, vivid. History, social life, arts and ceremonials, mythology. Illus., endmaps, index. 326 pp. \$4.00

mythology. Illus., endmaps, index. 326 pp. \$4.00

121 SPIDER WOMAN. Gladys A. Reichard. Through the warp and woof of this story of Navajo weaving runs a true and colorful design of Indian life, character and customs. Vivid and understanding, it makes ethnology as gripping as romance. Photos, double-page full color sandpainting.

287 pp. \$3.50

122 TRADERS TO THE NAVAJOS, Gillmor and Wetherill. John Wetherill made the first excavations at Mesa Verde ruins and led the first white men to Rainbow Bridge. His wife endeared herself to the Navajo as have few whites. This is the Wetherills' story and the stories they heard around hogan fires. Illus. 265 pp. \$3.00

131 HAWK OVER WHIRLPOOL, Ruth M. Underhill. States in poetic and moving words unsolved problem of Indian adjustment to white civilization. Told through life of a southern Arizona Indian boy who although bitter and disillusioned, has a vision of a new red-white relationship. 255 pp \$2.50

These are the books which Desert Magazine staff has added to its bookshelf this month ESPE-CIALLY FOR YOU. Make your selection from this list, then write for a complete new catalog for other titles on the Southwest. Desert cards will be enclosed with gift books.

123 THE OUT TRAIL, Mary Roberts Rinehart. Stimulating, refreshing panorama of Southwest. A born adventurer records her experiences on cattle ranches and mountain trails, in Indian country and south of the border.

246 pp. \$1.00

124 JEDÉDIAH SMITH, Maurice S. Sullivan. Full length portrait of the greatest trail breaker of his period against epic background of mapping and exploring the Far West. "Not a dull line" in the whole book. Notes, index. Sale price \$3.00

125 BLACK RANGE TALES. James A. McKenna. "Uncle Jimmie" McKenna, prospector and pioneer, relates with compelling human interest his 60 years of life and adventure in the Southwest, especially mining areas of New Mexico. Woodcuts, 300 pp. Sale price \$2.50

126 DEZBA, Woman of the Desert, Gladys A. Reichard. Revealing and understanding story of a Navajo family. One of the most constructive and sensitive statements of the Indian adjustment problem. 56 full page photos, colored endmaps. Sale price.
\$2.50

127 SAGA OF BILLY THE KID, Walter Noble Burns. The Southwest's most famous desperado. His battles, capture, escape, loves, duels and death are here completely told. 322 pp \$1.00

128 TOMBSTONE, Walter Noble Burns. Story of the "Town too tough to die," symbolic of the gun-toting, cattle rustling days in Old Arizona. As history it is accurate; as a story it holds you spellbound. 398 pp. \$1.29

129 PATHFINDERS, R. G. CLELAND. California volume in a historical series. Covers era from English sea rovers to John Charles Fremont, including "Conquerors of the Desert."

Biblio index maps Woodguts 450 pp. Sale price. \$2.50

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